

# State of Missouri



## 1997 Highway Safety Plan (HSP)

for the Governor's Highway Safety Program

### **Missouri Division of Highway Safety**

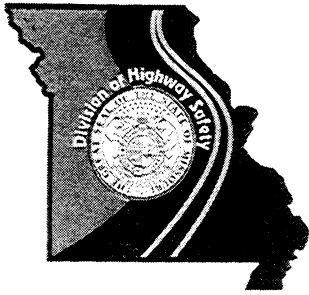
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# Missouri Division of Highway Safety

Department of Public Safety

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Mel Carnahan  
Governor

Gary B. Kempker  
Department Director

Dan A. Needham, Div. Director  
Gov. Hwy. Safety Rep.

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September 10, 1996

According to 23 USC Chapter 4 – Highway Safety Act of 1966, enclosed is the 1997 Highway Safety Plan for the State of Missouri.

While numerous people were instrumental in the development of this Plan, special thanks are expressed to Marty Carso and Phyllis Emmel of the Statistical Analysis Center of the Missouri State Highway Patrol. The data and evaluation they provided established the foundation for this work.

Questions or comments concerning this report should be directed to Vicky Williams, Management Specialist at Missouri Division of Highway Safety.

Sincerely,

Dan A. Needham  
Director and Governor's Highway  
Safety Representative

DAN:ks

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# STATE OF MISSOURI

## 1997 HIGHWAY SAFETY PLAN

### PROCESS DESCRIPTION

#### ***Mission***

The mission of the Missouri Division of Highway Safety (MDHS) is to reduce the number and severity of traffic crashes occurring in our state. This is accomplished through implementation of the Governor's Highway Safety Program according to the federal Highway Safety Act of 1966 and subsequent modifications.

#### ***Highway Safety Plan***

The Governor's Highway Safety Program is outlined in an annual Highway Safety Plan (HSP) which is submitted to the Governor, the National Highway Traffic Safety Administration (NHTSA), and the Federal Highway Administration (FHWA). This document describes how Missouri's federal 402 program appropriation will be used to promote highway safety in our State. The 1997 HSP falls within the realm of the federal fiscal year beginning October 1, 1996 and ending September 30, 1997.

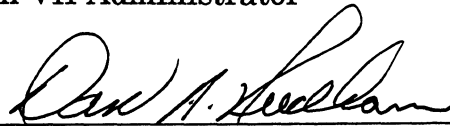
#### ***State Problems—State Solutions***

The National Highway Traffic Safety Administration has recently redesigned their strategy for overview of the states' HSP—the Federal government will no longer impose what should be accomplished by the states. Instead, they will take a service role. Their administrative oversight will be to verify that states do not violate the federal guidelines or the legislative intent of the 402 Highway Safety program. The state programs will now be driven by state and local problem identification data. The HSP will be a performance-based, dynamic plan which allows for continual revisions and modifications in order to enhance the outcome of our efforts.

#### ***Submission***

The Division herewith submits the 1997 Missouri Highway Safety Plan to:

The Honorable Mel Carnahan, Governor  
Troy Ayers, NHTSA Region VII Administrator  
Gerald Reihsen, FHWA Region VII Administrator



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Dan A. Needham  
Governor's Highway Safety Representative  
Director, Missouri Division of Highway Safety



## OVERVIEW

### ***Problem Identification***

Problem identification involves the study of relationships between collisions and the characteristics of population, licensed drivers, people using the roadways, registered vehicles, vehicle miles, and roadway engineering. Drivers are classified into subgroups according to age and gender. Vehicles are classified according to vehicle type. Roads have been classified according to location (urban vs. rural), safety design, appropriate signing, traffic volume, etc. Collisions are further analyzed by time of day, day of week, month of year, driver subgroups; primary collision factor; use of alcohol and other drugs; and employment of safety equipment.

The data utilized herein (1995 Missouri Traffic Crashes) was obtained from the Statewide Traffic Accident Reporting System (STARS) as provided by the Statistical Analysis Center (SAC) of the Missouri State Highway Patrol. In order to more effectively compare the impact our countermeasures have had upon traffic safety problem areas, crash data from the calendar year 1996 may also be utilized as it becomes available.

### ***Highway Safety Plan (HSP)***

The Division of Highway Safety is directed to develop a HSP designed to reduce the number and severity of traffic crashes in Missouri. Traffic crash data, compiled by the Statistical Analysis Center, is analyzed and published annually in the Traffic Safety Compendium. The Compendium provides the framework from which the HSP is designed—assuring that Missouri's Plan is data driven and that our efforts are directed to the appropriate problem areas. Specific areas which, over numerous years, have warranted attention are: *Police Traffic Services (including training and enforcement of speed & other hazardous moving violations); Alcohol Impairment; Occupant Protection; Traffic Records; Speed Involvement, and Engineering Services*. The countermeasure efforts addressed in this HSP will focus on these problem areas.

### ***Benchmarks***

Benchmarks are ascertained in order to provide "ideals" toward which we will strive. Problem areas were identified for which benchmarks have been established. The areas in which we believe our efforts may have an impact are: *Death Rate; Alcohol Impairment; Occupant Protection; Speed and Engineering Services*. While these benchmarks are quantifiable for evaluation and accountability purposes, it should be noted that they are not totally reliant upon the programs implemented by this Division. They are quite often highly dependent upon existing legislation and the motoring public's adherence to traffic laws and safe driving habits.

Prior to establishing effective benchmarks, it was necessary to consider several strategic issues which could positively impact these benchmarks:

- 1) Innovation—Projects were somewhat stale; some were good but needed to be updated; others needed to be eliminated altogether.
- 2) Partnerships—The base of partners would have to be expanded in order to draw from the limitless resources available in the private sector (a common practice in "not-for-profit" organizations, but an avenue which had been neglected).
- 3) Media—Without media support, much effort was wasted. A properly marketed, dynamic media campaign could capture the attention of reporters and the public and keep that attention focused on traffic safety.
- 4) Customer Service—Internal operations would have to be streamlined in order to do business more efficiently and equitably for our customers.

We have carefully considered these four strategic issues and established internal goals and objectives to address them (identified in our state Strategic Plan). Success in reaching our goals and objectives should have a positive impact on traffic safety, ultimately resulting in reaching the desired benchmarks.

## STATE CERTIFICATIONS AND ASSURANCES

Failure to comply with applicable Federal statutes, regulations and directives may subject State officials to civil or criminal penalties and/or place the State in a high risk grantee status in accordance with 49 CFR §18.12.

Each fiscal year the State will sign this certification and assurances statement that the State complies with all applicable Federal statutes, regulations, and directives in effect with respect to the periods for which it receives grant funding. Applicable provisions include the following:

- 23 USC Chapter 4 - Highway Safety Act of 1966
- 49 CFR Part 18 - Uniform Administration Requirements for Grants and Cooperative Agreements to State and Local Governments
- 49 CFR Part 19 - Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations
- 23 CFR Chapter II - NHTSA & FHWA Procedures and General Provisions for State Highway Safety Programs
- 45 CFR Part 74 - Appendix E - Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts with Hospitals
- OMB Circular A-87 - Cost Principles for State, local and Indian Tribal Governments
- OMB Circular A-21 - Cost Principles for Educational Institutions
- OMB Circular A-122 - Cost Principles for Nonprofit Organizations
- OMB Circular A-128 - Audit of State and Local Governments
- OMB Circular A-133 - Audits of Institutions of Higher Education and Nonprofit Institutions
- NHTSA Order 462-6C - Matching rates for State and Community Highway Safety Programs
- Highway Safety Grant Funding Policy for NHTSA/FHWA Field-Administered Grants (Effective 7/14/95)

## CERTIFICATION STATEMENTS

The Governor is responsible for the administration of the State Highway Safety Program through a State Highway Safety Agency which has adequate powers and is suitably equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management and disposition of equipment) to carry out the program in compliance with 23 USC 402(b) (1) (A);

The political subdivisions of this State are authorized, as part of the State Highway Safety Program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation in compliance with 23 USC 402(b) (1) (B);

At least 40 percent of all Federal funds apportioned to this State under 23 USC 402 for this fiscal year will be expended by or for the benefit of the political subdivision of the State in carrying out local highway safety programs authorized in accordance with 23 USC 402 (b) (1) (C), unless this requirement is waived by the Secretary of Transportation;

This State's Highway Safety Program provides adequate and reasonable access for the safe and convenient movement of physically handicapped person, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks in compliance with 23 USC 402 (b) (1) (D);

This State's highway safety program provides for programs to encourage the use of safety belts by drivers of, and passengers in, motor vehicles, in compliance with 23 USC 402 (b) (1) (E);

Cash drawdowns will be initiated only when actually needed for disbursement, cash disbursements and balances will be reported in a timely manner as required by NHTSA, and the same standards of timing and amount, including the reporting of cash disbursement and balances, will be imposed upon any secondary recipient organizations in accordance with 49 CFR 18.20, 18.21, and 18.40 (failure to adhere to these provisions may result in the termination of advance financing);

Arrangements have been made for the financial and compliance audit required by the Single Audit Act of 1984 (OMB Circular A-128), which is to be conducted within the prescribed audit reporting cycle (failure to furnish an acceptable audit, as determined by the cognizant Federal agency, may result in denial or require return of Federal funds);

The State has submitted appropriate documentation for review to the single point of contact designated by the Governor to review Federal programs, as required by Executive Order 12372 (Intergovernmental Review of Federal Programs);

Equipment acquired under this agreement for use in highway safety program areas shall be used and kept in operation for highway safety purposes by the State; or the State, by formal agreement with appropriate officials of a political subdivision or State agency, shall cause such equipment to be used and kept in operation for highway safety purposes;

Each recipient of Section 402 funds has a financial management system that complies with the minimum requirements of 49 CFR Part 18.20;

Each recipient of Section 402 funds will comply with all applicable State procurement procedures;

The State is funding programs that are within the NHTSA/FHWA National Priority program areas;

The State Highway Safety Agency will comply with Title VI of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973, as amended, as implemented by 49 CFR Parts 21 and 27, to ensure that no person in the United States shall, on the grounds of race, color, national origin, or handicap, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this program.

#### ***THE DRUG-FREE WORKPLACE ACT OF 1988 (49 CFR PART 29 SUB-PART F)***

The State will provide a drug-free workplace by:

1. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
2. Establishing a drug-free awareness program to inform employees about:
  - a) The dangers of drug abuse in the workplace.
  - b) The grantee's policy of maintaining a drug-free workplace.
  - c) Any available drug counseling, rehabilitation, and employee assistance programs.
  - d) The penalties that may be imposed upon employees for drug violations occurring in the workplace.
3. Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (1).
4. Notifying the employee in the statement required by paragraph (1) that, as a condition of employment under the grant, the employee will--

- a) Abide by the terms of the statement
  - b) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.
5. Notifying the agency within ten days after receiving notice under subparagraph (4) (b) from an employee or otherwise receiving actual notice of such conviction.
6. Taking one of the following actions, within 30 days of receiving notice under subparagraph (4) (b), with respect to any employee who is so convicted--
- a) Taking appropriate personnel action against such an employee, up to and including termination; and
  - b) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, state, or local health, law enforcement, or other appropriate agency.
7. Making a good faith effort to continue to maintain a drug-free workplace through implementation of the above paragraphs 1 through 6.

### ***BUY AMERICA ACT***

The State will comply with the provisions of the Buy America Act (23 USC 101 Note) which contains the following requirements:

Only steel, iron and manufactured items produced in the United States may be purchased with Federal funds unless that State can show that such domestic purchases would be inconsistent with the public interest; that such materials are not reasonably available and are of an unsatisfactory quality; or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. Clear justification for the purchase of non-domestic items must be in the form of a waiver request submitted to and approved by the Secretary of Transportation.

### ***CERTIFICATION REGARDING LOBBYING***

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

### ***CERTIFICATION REGARDING DEBARMENT AND SUSPENSION***

In accordance with the provisions of 49 CFR Part 29, the State agrees that it shall not knowingly enter into any agreement under its Highway Safety Plan with a person or entity that is barred, suspended, declared ineligible, or voluntarily excluded from participation in the Section 402 program, unless otherwise authorized by NHTSA. The State further agrees that it will include the following clause and accompanying instruction, without modification, in all lower tier covered transactions, as provided by 49 CFR Part 29, and in all solicitations for lower tier covered transactions.

#### **Instructions for Certification**

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms covered transaction, "debarred", "suspended", "ineligible", "lower tier covered transaction", "participant", "person", "primary covered transaction", "principal", "proposal", and "voluntarily excluded", as used in this clause, have the meanings set out in the Definition and Coverage sections of 49 CFR Part 29. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. (See Below)
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Non-Procurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.



9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

#### ***CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION—LOWER TIER COVERED TRANSACTIONS***

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participants shall attach an explanation to this proposal.

#### ***MINORITY BUSINESS ENTERPRISE REQUIREMENTS***

In accordance with the provisions of 49 CFR Part 23, the State agrees to abide by the following statements, and shall ensure that these statements are included in all subsequent agreements and/or contracts assisted by Section 402 funds:

It is the policy of the Department of Transportation that minority business enterprises, as defined in 49 CFR Part 23, shall have the maximum opportunity to participate in the performance of contract financed in whole or in part with Federal funds under this agreement. Consequently, the MBE requirements of 49 CFR Part 23 apply to this agreement.

The recipient or its contractor agrees to ensure that minority business enterprises as defined in 49 CFR Part 23 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, all recipients or contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 23 to ensure that minority business enterprises have the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of DOT-assisted contracts.

## ***ENVIRONMENTAL IMPACT***

The Governor's Representative for Highway Safety has reviewed the State's Fiscal Year 1997 Highway Safety Planning document and hereby declares that no significant environmental impact will result from implementing this highway safety plan. If, under a future revision, this Plan will be modified in such a manner that a project would be instituted that could affect environmental quality to the extent that a review and statement would be necessary, this office is prepared to take the action necessary to comply with the National Environmental Policy Act (42 USC 4321 et seq.).



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**Governor's Representative for Highway Safety**

9/10/96  
Date

# Police Traffic Services

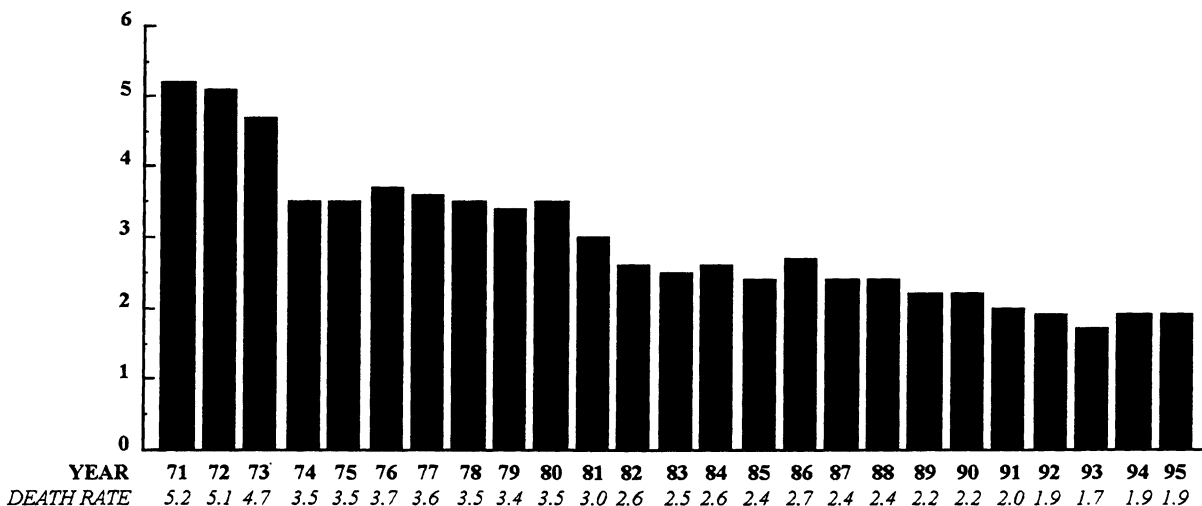


## POLICE TRAFFIC SERVICES

### *Deaths Due to Traffic Crashes – History*

Over the past 25 years Missouri has experienced a dramatic decline in traffic crash fatalities in relation to the number of miles driven on its roadways. For instance, in **1971** Missouri had **5.2 fatalities** for every 100 million miles of travel compared to **1995** when the State death rate had dropped to **1.9 fatalities**. While the reduction in death rate can be attributed to numerous Federal, State, and local policies, programs, and legislation, the Governor's Highway Safety Program has certainly played a major role in this effort.

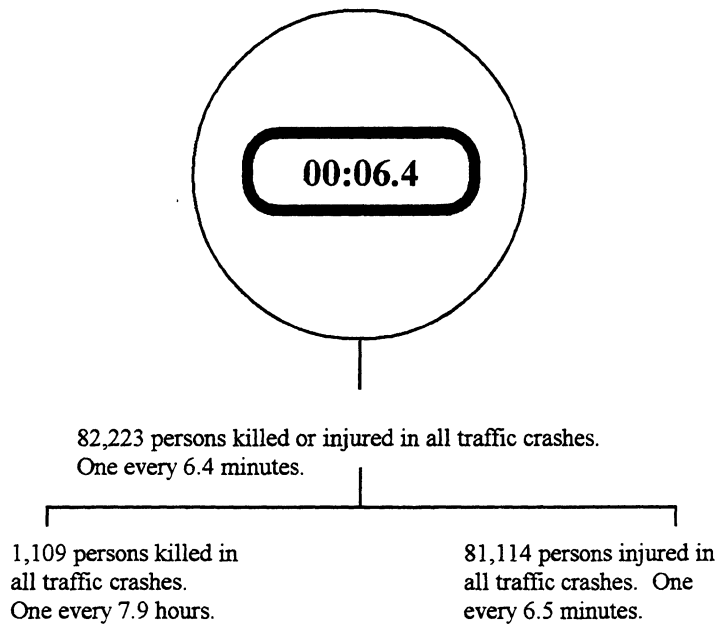
MISSOURI DEATH RATE  
1971 - 1995



### *Current Traffic Crash Data—1995*

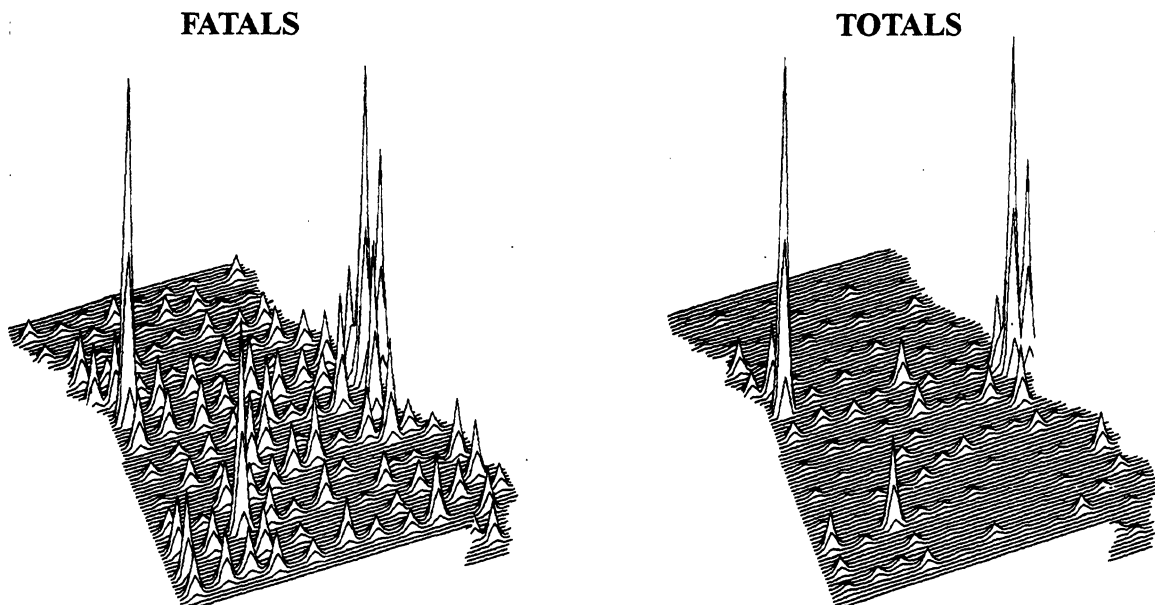
Even though statistics like the death rate indicate a positive impact is being made on Missouri's traffic safety problem, it should not be a cause for complacency. A substantial number of people continue to be killed and injured in traffic crashes on Missouri roadways and most of those crashes are preventable. In 1995, there were **185,915 traffic crashes** resulting in **1,109 deaths** and **81,114 injuries**—one every **6.4 minutes**.

# MISSOURI TRAFFIC CRASH PERSONAL INJURY PROBLEM ANALYSIS CLOCK 1995



As expected, traffic crashes are not evenly distributed on Missouri roadways. They occur in larger numbers in more densely populated regions of the State compared to the rural areas. Of the 185,915 traffic crashes, **65.1%** occurred in an *urban* community (population >5,000) while the remaining 34.9% occurred in a rural area (<5,000 population or unincorporated). However, rural areas of the State cannot be discounted. They take on a much greater significance when examining traffic crashes resulting in fatalities. Almost three-fourths — **74.9%** — of the *fatal crashes* occurred in *rural areas* in 1995.

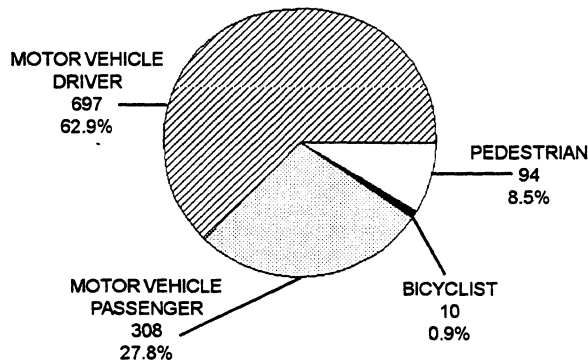
## 1995 MISSOURI TRAFFIC CRASHES



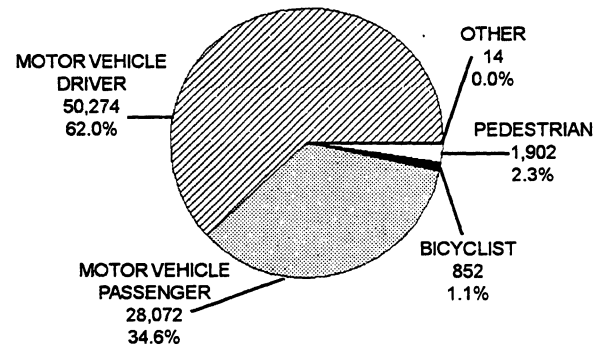
The vast number of people killed or injured in traffic crashes were drivers and/or passengers of motorized vehicles. Although *pedestrians* do not make up a substantial proportion of persons injured in Missouri traffic crashes, they do account for a *larger proportion* of those *killed* in these incidents—8.5%.

## 1995 MISSOURI TRAFFIC CRASHES

### PERSONS KILLED



### PERSONS INJURED

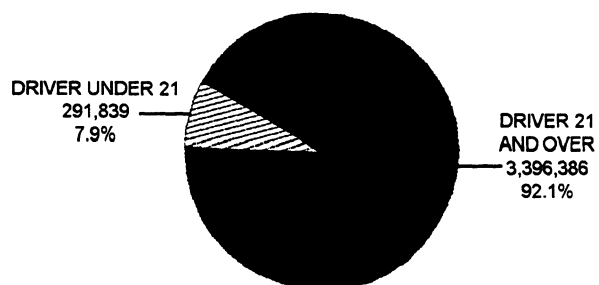


## SPECIAL INTEREST GROUPS

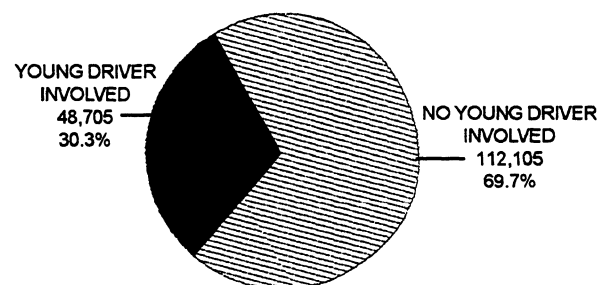
### • Youthful Drivers

It is unfortunate that our youthful drivers continue to be substantially over-represented in traffic crashes. Of the 3,688,225 licensed drivers in 1995, *only 7.9%* (291,839) were between the ages of 16 and 20 years. Of all 1995 Missouri crashes, *30.3%* involved a young driver in which 270 people were killed and 26,288 were injured.

### 1995 MISSOURI LICENSED DRIVERS DRIVER AGE

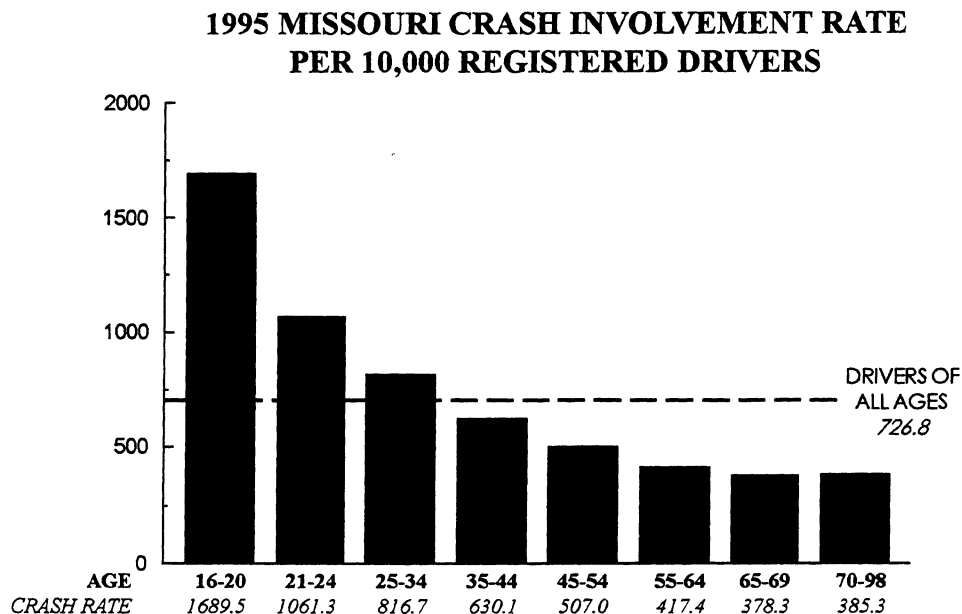


### 1995 MISSOURI YOUNG DRIVER INVOLVED TRAFFIC CRASHES



UNKNOWN DATA NOT INCLUDED

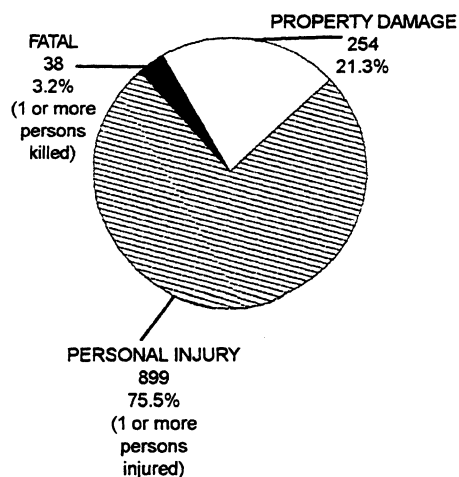
As the graph below indicates, 726.8 of every 10,000 licensed drivers (all ages) were involved in a traffic crash in Missouri. However, for those licensed drivers *under the age of 21*, that figure increased to *1,689.5 of every 10,000*.



- **Motorcycle Crashes**

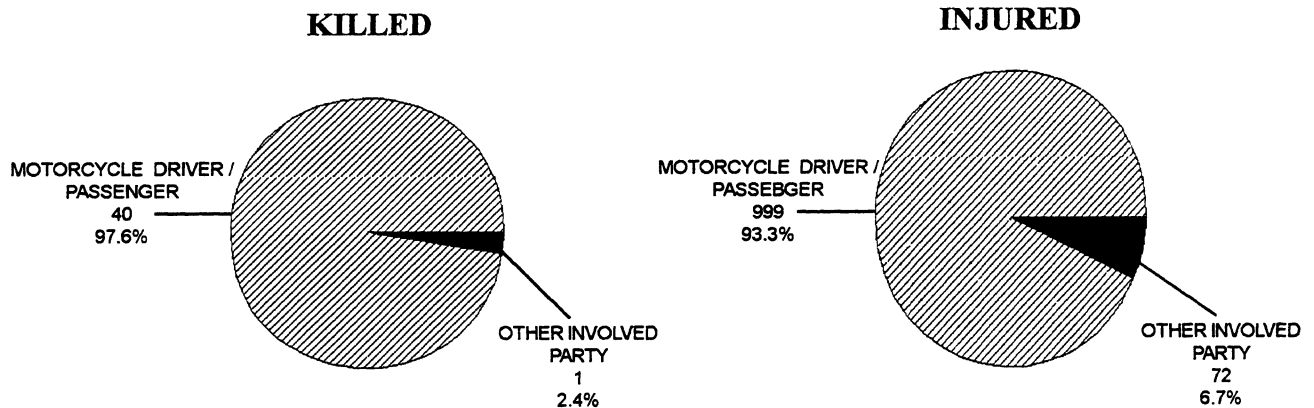
Although motorcycle crashes do not occur with great frequency, they usually result in deaths or injuries. Of the 185,915 traffic crashes, 0.5% resulted in a fatality and 27.9% resulted in someone being injured. During the same period, there were 1,191 traffic crashes involving one or more motorcycles. In these incidents, 3.2% resulted in 41 people being killed and 75.5% resulted in 1,071 people being injured.

**1995 MISSOURI MOTORCYCLE TRAFFIC CRASHES**



In most instances, the motorcycle drivers and/or passengers are the ones killed and injured during the crash—97.6% of the deaths and 93.3% of the injuries.

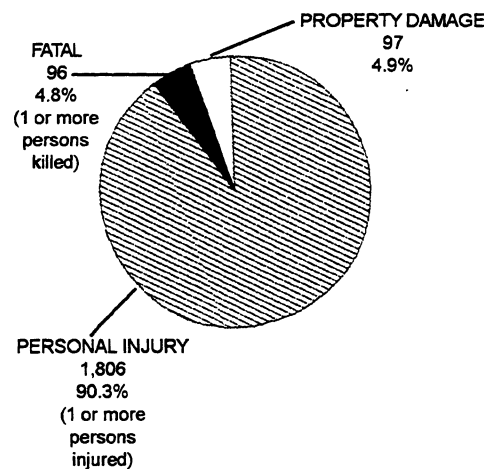
### 1995 MISSOURI MOTORCYCLE CRASHES PERSON INVOLVEMENT



- ***Pedestrian Involvement***

The vast number of people killed or injured in traffic crashes were drivers and/or passengers of motorized vehicles. In 1995 there were 1,999 traffic crashes where one or more pedestrians were involved. In these incidents, 4.8% resulted in one or more persons being killed and 90.3% resulted in a personal injury (compared to all crashes at 0.5% and 27.9% respectively).

### 1995 MISSOURI PEDESTRIAN TRAFFIC CRASHES

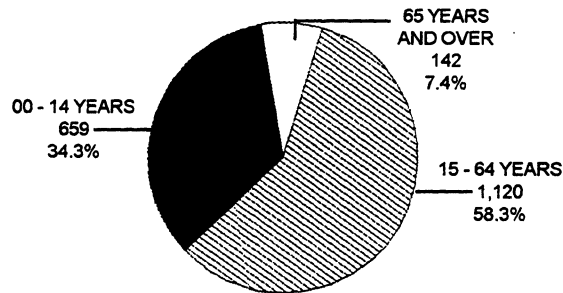




A proportionately large number of these pedestrians are young people and, as a result, reducing these types of crashes takes on additional importance. Of the 1,996 pedestrians killed and injured, 34.3% were under the age of 15. Of all people killed and injured, 10.2% were under the age of 15. In addition, a greater proportion of older pedestrians are being killed on Missouri's roadways. Of the 94 pedestrians killed, 25.5% were 65 years or older compared 15.7% of all persons killed in that age group.

## 1995 MISSOURI TRAFFIC CRASHES INVOLVING PEDESTRIANS

### AGE OF PEDESTRIANS KILLED AND INJURED



UNKNOWN DATA NOT INCLUDED

### ***Problem Areas – Enforcement Issues***

Police Traffic Services will address numerous problem areas in traffic safety with an emphasis on enforcement issues. Through data analysis, we discovered answers to the following questions:

*What are Missouri's most serious areas of traffic safety concern?*

- Speeding
- Alcohol Impairment
- Poor Occupant Restraint Use

*Which target groups of drivers are causing the most traffic crashes?*

- Speeding drivers
- Drinking drivers
- Young Drivers (under the age of 21)
- Mature Drivers (over the age of 55)

*Which geographic locations should be targeted?*

- Statewide -- While more crashes occur in the densely populated urban areas, three-fourths of the fatal crashes occur in rural areas

*Which vehicles are involved in the most traffic crashes?*

- Automobiles
- Pickup trucks
- Motorcycles are also weighted heavily because of the higher potential for death or serious injury to the driver

### ***Benchmarks***

1. Reduce the death rate from 1.9 to 1.7
2. Increase the number of hazardous moving violations issued at high accident locations; decrease crashes at those locations
3. Reduce the number of drinking drivers and the crashes resulting from those drivers (specific Benchmarks identified in Alcohol Involvement section)
4. Increase occupant restraint usage through enforcement and education (specific Benchmarks identified in Occupant Restraint section)

### ***Performance Measures***

Continue tracking statewide death rate and analyzing the statistics to determine which countermeasure programs have an effect on reducing this figure. Individual Police Traffic Services projects will be monitored and evaluated to determine whether increased enforcement and education is having a positive impact on the reduction of traffic crashes and the resulting injuries and deaths.

### ***Strategies***

- Assist law enforcement agencies in problem identification and preparation of projects which will most effectively attack their traffic safety problems
- Provide funding for projects which put additional traffic safety officers on the streets to enforce hazardous moving violations
- Provide suitable equipment to enforce the traffic safety laws
- Provide training to complement and supplement their enforcement efforts

## POLICE TRAFFIC SERVICES GRANT SELECTION PROCESS

### *Grant Review Committee*

The 402 Grant Review Committee was formed in June 1996 to assist the Missouri Division of Highway Safety (MDHS) with the critical responsibility of reviewing and selecting noteworthy projects for inclusion in the FY '97 Highway Safety Program. Each member of the committee was selected for their expertise in the police traffic services field within the state of Missouri. There were no committee members selected who may have had an individual interest in awarding grants to particular police agencies.

### *Committee Members*

Jim Green, NHTSA Region VII  
Eric Shepherd, Missouri Department of Public Safety  
Glenn Carriker, Missouri Safety Center, CMSU  
Becky Covington, Missouri Division of Highway Safety  
Bill Whitfield, Missouri Division of Highway Safety  
Sharon Adams, Missouri Division of Highway Safety

### *Grant Selection Criteria*

#### 1. Regional Territories Established

Traffic crash statistics were run to determine which communities had the highest traffic crash problems. Using those findings, the State was divided into 4 regions (chart attached) with fairly equal crash representation.

#### 2. Crash Data Ranking (by Region)

More data was run to locate the worst crash problem areas within each region. The committee then looked at applications falling within the top 5 counties and top 10 cities of each region.

#### 3. Problem Identification And Assessment

A new grant application form was developed and distributed in early March. Each applicant was required to identify their highway safety problem area(s). With the problems identified, they were then asked to submit a project which would address those needs and propose a solution. These applications were due by June 1, 1996. Of those applicants, only those who met the criteria set forth by region were further evaluated by the committee with two exceptions:

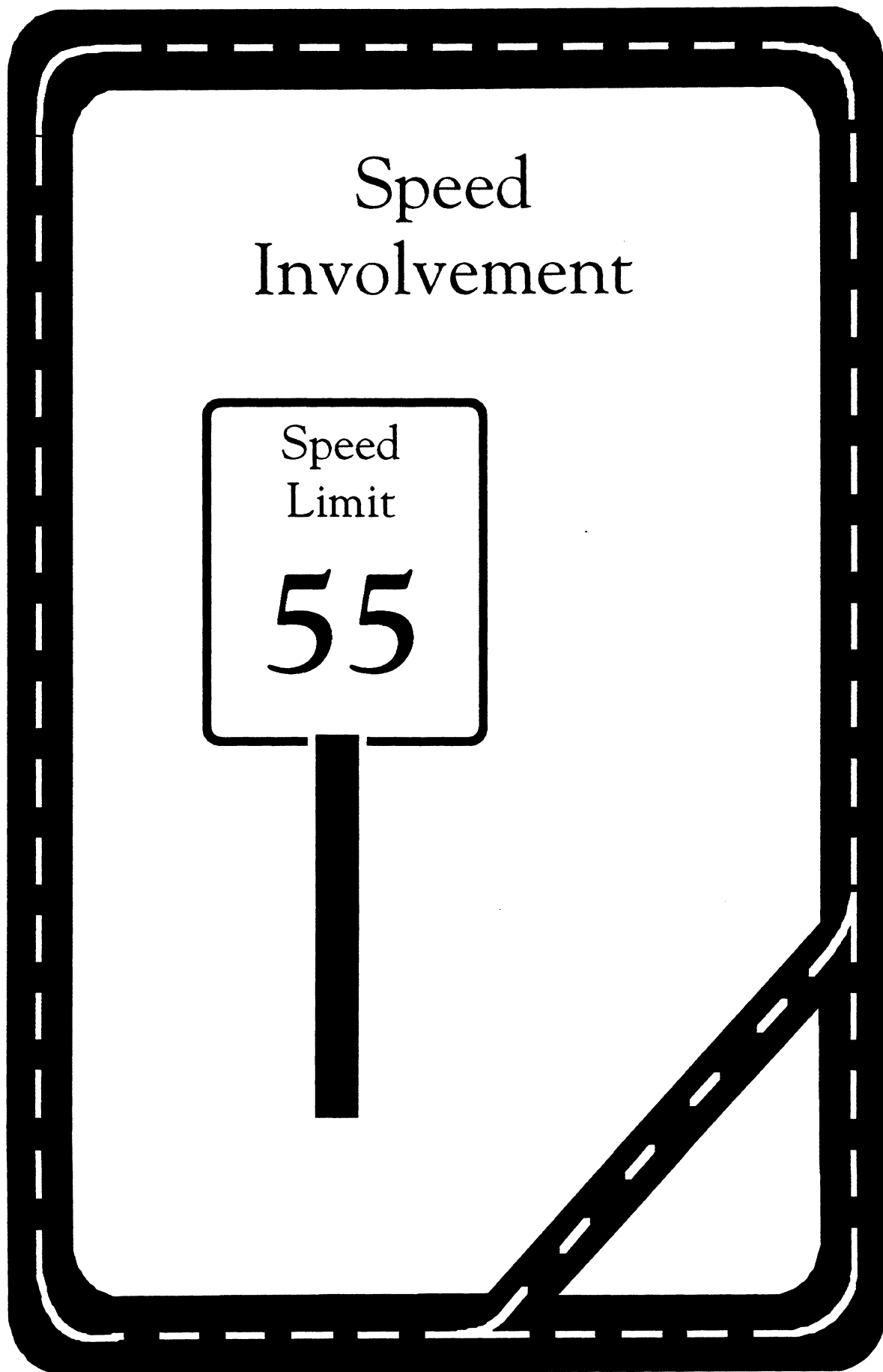
- Agencies having received FY '96 sobriety checkpoint funding were automatically funded for another year; and
- Several agencies which had developed special partnerships or particularly innovative concepts were also considered.

Each application was evaluated for validity and innovation. The committee then made cuts to the original proposals in order to meet budgetary constraints.

# Speed Involvement

Speed  
Limit

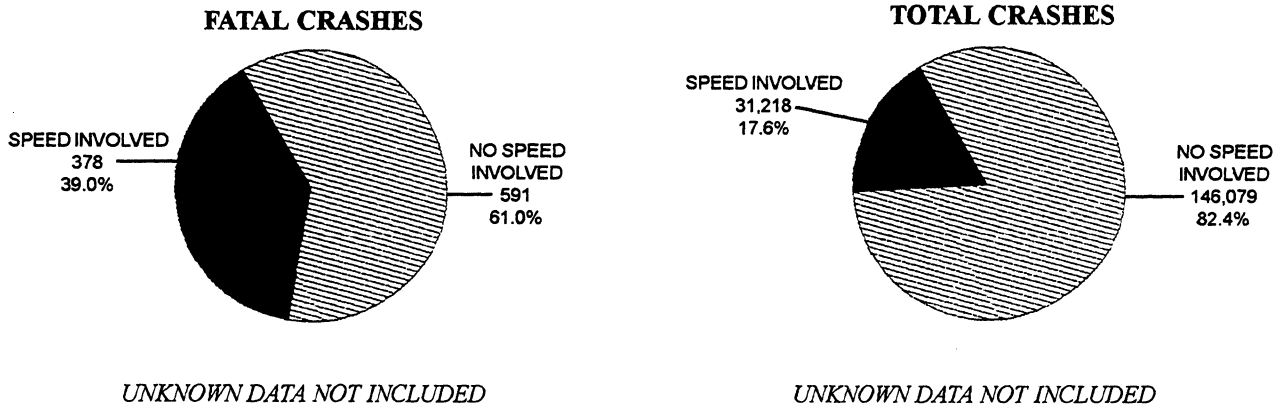
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## SPEED INVOLVEMENT

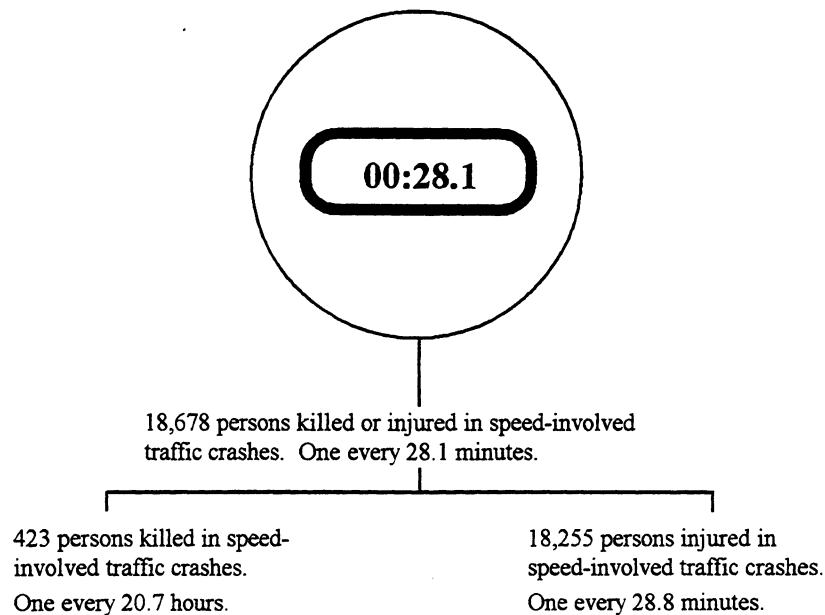
Speed is a substantial contributing factor in traffic crashes on Missouri's roadways, especially those resulting in death. Of the 185,915 traffic crashes which occurred in 1995, a total of 17.6% involved one or more drivers who were driving too fast for conditions or exceeding the speed limit. Missouri had 985 crashes where 1,109 people were killed—39.0% of them involved drivers who were speeding.

### 1995 MISSOURI SPEED-INVOLVED TRAFFIC CRASHES



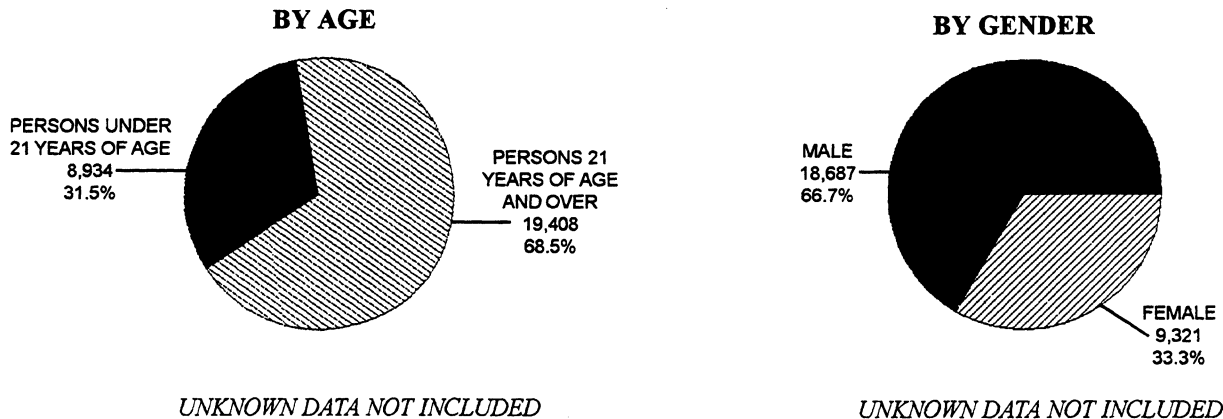
In the speed-involved crashes, 423 people died and 18,255 were injured—in other words, one death every 20.7 hours and one injury every 28.8 minutes.

### MISSOURI SPEED-INVOLVED PERSONAL INJURY PROBLEM ANALYSIS CLOCK 1995



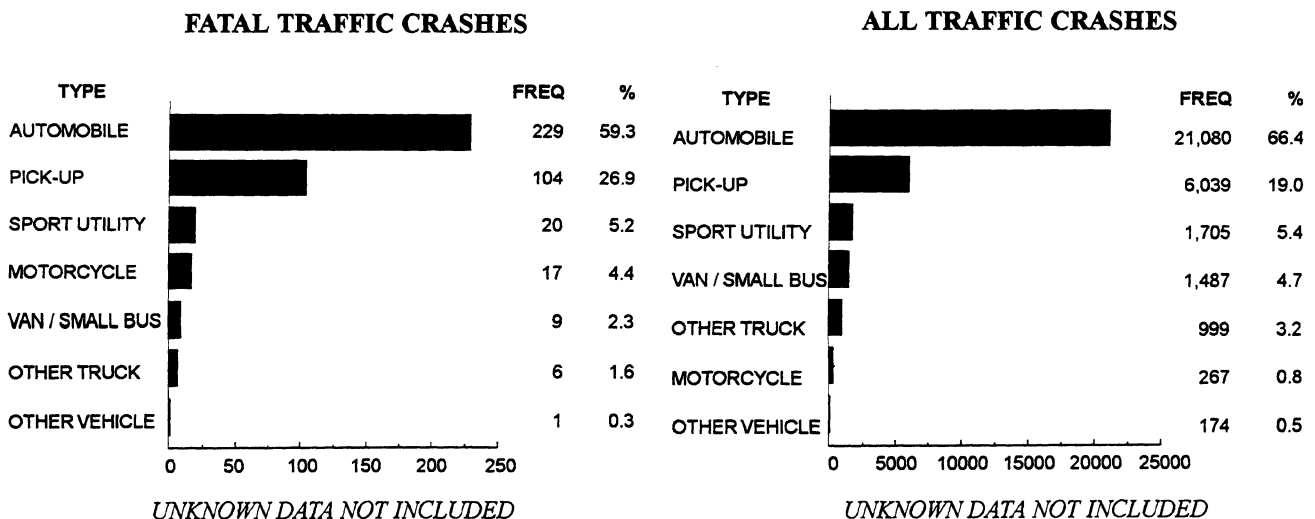
A sizable proportion of drivers speeding on Missouri roadways and causing traffic crashes are young and male. Of all *speeding drivers* involved in 1995 traffic crashes, about *one-third (31.5%)* were *under the age of 21*, and *66.7% were male*.

### 1995 MISSOURI TRAFFIC CRASHES DRIVERS OF MOTORIZED VEHICLES SPEEDING



The majority of speeding drivers were driving automobiles (66.4%), followed by pick-up trucks (19.0%), and sport utility vehicles (5.4%). However, when examining speeding drivers in *fatal crashes*, *pick-up trucks* make up *over one-fourth (26.9%)* of the vehicles involved.

### 1995 MISSOURI SPEED-INVOLVED TRAFFIC CRASHES BY VEHICLE TYPE



### ***Benchmarks***

1. No increase in speed-related fatal traffic crashes from the current rate of 39.0%.  
(Due to the increased speed limits on major highways within the State, it would be difficult and unrealistic to attempt to establish a benchmark to decrease speed-involved crashes and the resulting deaths and injuries. We believe that if we are able to keep these figures at a static level, that it itself should be a positive impact.)

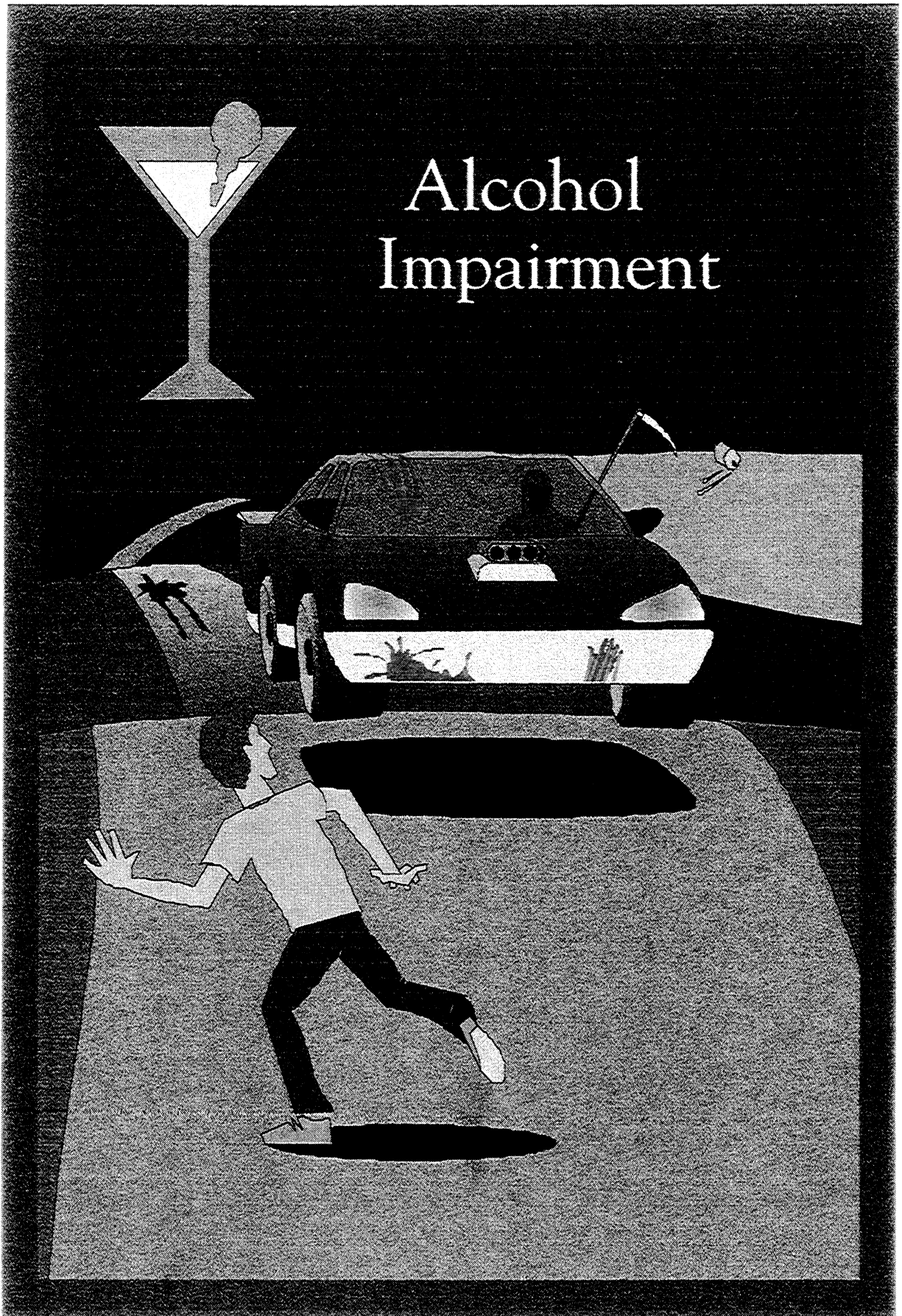
### ***Performance Measures***

Continue tracking and analyzing all speed-related crashes (especially those occurring on major highways and interstates) in order to identify whether the increased speed limits have made a significant impact. During this evaluation process, the Division will work with other strategic agencies to develop countermeasures addressing our concerns.

### ***Strategies***

- Participate in Safety Management System—a comprehensive effort addressing statewide traffic safety issues from an engineering, education and enforcement aspect (evaluation of the speed issue will be a major component of SMS)
- Combined Accident Reduction Enforcement (holiday saturation enforcement project with Highway Patrol)
- Fuel for Highway Patrol speed enforcement aircraft
- Participate in national efforts to track and evaluate the increased speed limits
- Provide hazardous moving violations saturation enforcement projects to local law enforcement (with emphasis on speed enforcement)

# Alcohol Impairment

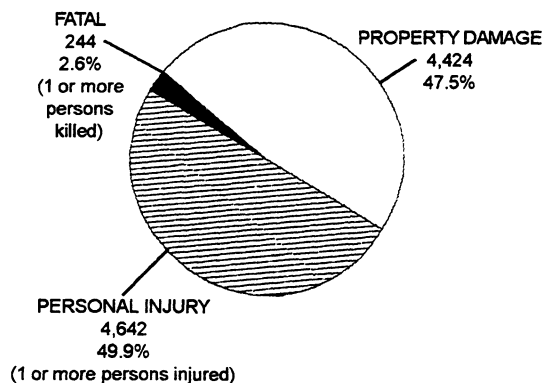




## ALCOHOL IMPAIRMENT

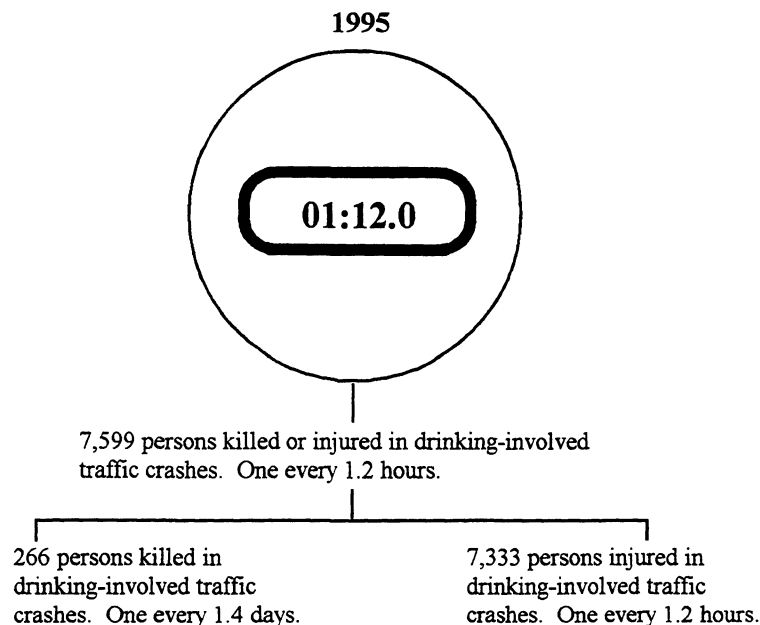
Alcohol is a substantial contributing factor in traffic crashes, especially in those crashes resulting in death or personal injury. In 1995, 185,915 traffic crashes occurred in the State. Of that total, 0.5% resulted in a fatality and 27.9% involved someone being injured in the incident. During the same time period, there were 9,310 traffic crashes where one or more drivers and/or pedestrians were drinking and, in the opinion of the investigating officer, *their intoxicated condition was a contributing factor to the crash*. In these incidents, 2.6% resulted in one or more persons being killed and 49.9% resulted in a personal injury. We must also qualify that alcohol intoxication is being underreported as a contributing factor in traffic crashes. As a result, the seriousness of this problem is even greater than these statistics indicate.

### 1995 MISSOURI DRINKING-INVOLVED TRAFFIC CRASHES



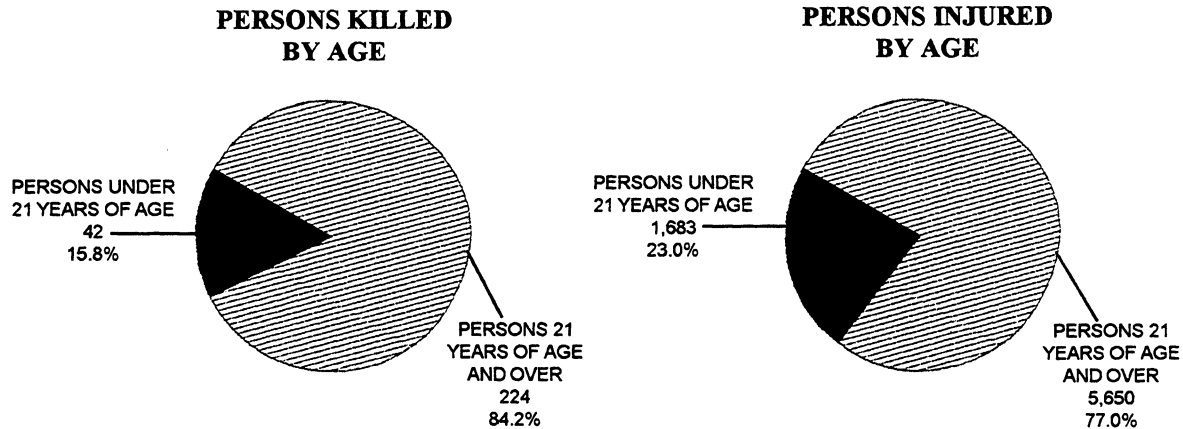
In those 9,310 traffic crashes characterized as alcohol-related, 266 people died (one every 1.4 days) and another 7,333 were injured (one every 1.2 hours).

### MISSOURI DRINKING-INVOLVED PERSONAL INJURY PROBLEM ANALYSIS CLOCK



Of great concern is the fact that far too many of our youth are being killed and injured in alcohol-related traffic crashes. Of those 266 persons who died in alcohol-related crashes, 15.8% were under the age of 21. Of the 7,333 who were injured in these incidents, 23.0% were young people.

#### 1995 MISSOURI TRAFFIC CRASHES

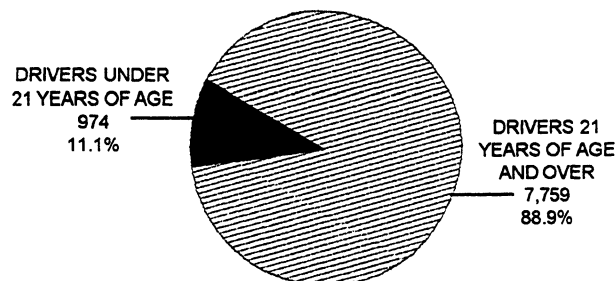


Another frightening statistic concerns youthful drivers (those under age 21) who are drinking and driving and then ultimately ending up in a traffic crash. Of the 9,284 drivers of motor vehicles whose consumption of alcohol caused a 1995 traffic crash, 11.1% were under the age of 21. In other words, a drinking driver *under the age of 21* caused a traffic crash every 9.0 hours!

Youthful drivers are inexperienced to begin with. When that inexperience is coupled with alcohol, the consequences are far too often deadly. A total of 231 drinking drivers of motor vehicles were involved in crashes where one or more persons were killed. Of these drivers, 12.6% were under the age of 21. Unfortunately when young people choose to drink and drive, they usually have several passengers in the vehicle with them. Thirty-seven people died in these traffic crashes involving young drivers—35.1% were the under-age drivers themselves, but the remaining 64.9% were others involved in the crash.

#### 1995 MISSOURI TRAFFIC CRASHES

##### DRINKING DRIVERS OF MOTORIZED VEHICLES BY AGE



UNKNOWN DATA NOT INCLUDED

Because of the seriousness of the alcohol-related crash problem, and especially the overwhelming connection with young drivers, a large percentage of the Division's efforts are being directed toward enforcement and prevention efforts in this area.

### ***Benchmarks***

1. To decrease alcohol-related crashes 2.5% from 9,310 (1995 base year).
2. To decrease alcohol-related crashes caused by drivers under 21 from 11.1% to 10%.

### ***Performance Measures***

Ongoing analysis of the traffic crash data in Missouri will serve as the means to measure progress toward the Benchmarks. In alcohol-related crashes, specific criteria will be addressed: drivers of motorized vehicles versus pedestrians; age and sex of drivers; location of occurrence; time and date of occurrence. Crash data will be analyzed in those target areas where alcohol countermeasure projects have been established.

Future measures will include arrest and conviction data on alcohol-related traffic offenders. This data will be used to evaluate existing legislation and to determine needed training and equipment for effective enforcement, prosecution, adjudication and treatment of these offenders.

### ***Strategies***

#### **Public Information & Education**

- Educate the public about the dangers of drinking and driving through public awareness campaigns, distribution of education materials, regional traffic safety workshops, health and safety fair displays, and public service announcements
- Incorporate programs into our schools which will educate youth about the dangers of drinking and driving
- Develop statewide designated driver programs which stress alternatives to drinking and driving
- Educate alcohol servers in intervention techniques
- Provide training and equipment to enhance the state's tracking abilities (through the Department of Revenue)

#### **Enforcement**

- Provide training on detection and apprehension of impaired drivers; field sobriety testing; courtroom testimony; and DWI crash investigation techniques
- Provide funding for special alcohol saturation forces and sobriety checkpoints
- Provide equipment to enhance enforcement efforts (BAT vans, PBTs, and In-Car Video Cameras) and appropriate training to assure effective use of this equipment
- Provide funding for projects designed to apprehend minors attempting to purchase alcoholic beverages
- Increase consistency in enforcement efforts statewide by introducing a law enforcement campaign for participating agencies

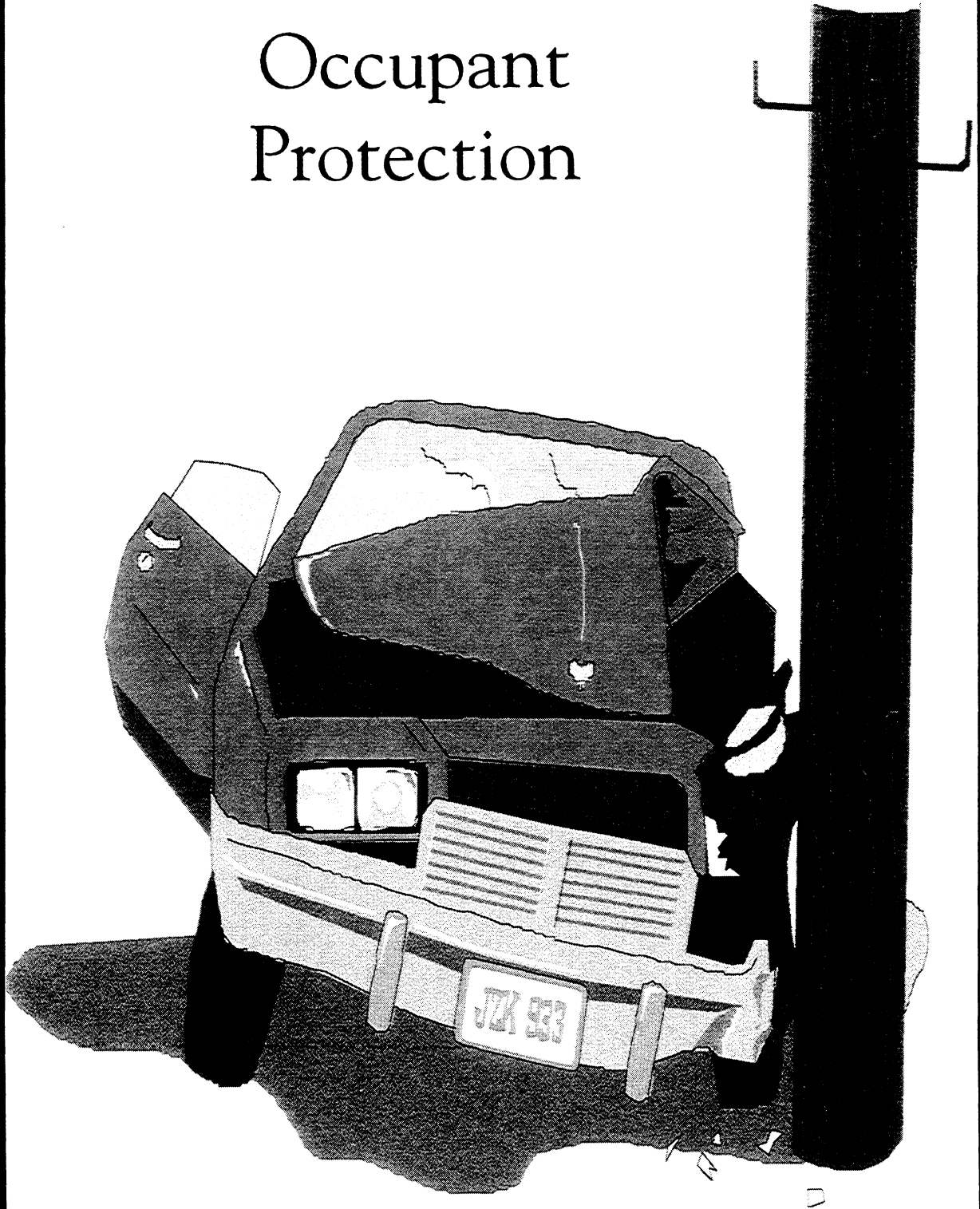
### Prosecution/Adjudication

- Upgrade equipment necessary to correctly and accurately analyze the breath samples taken from DWI offenders
- Train prosecutors and judges on local and national DWI issues for more effective sentencing of offenders

### Treatment/Rehabilitation

- Work towards a comprehensive DWI tracking system that will allow for a more comprehensive approach to alcohol-related problem identification

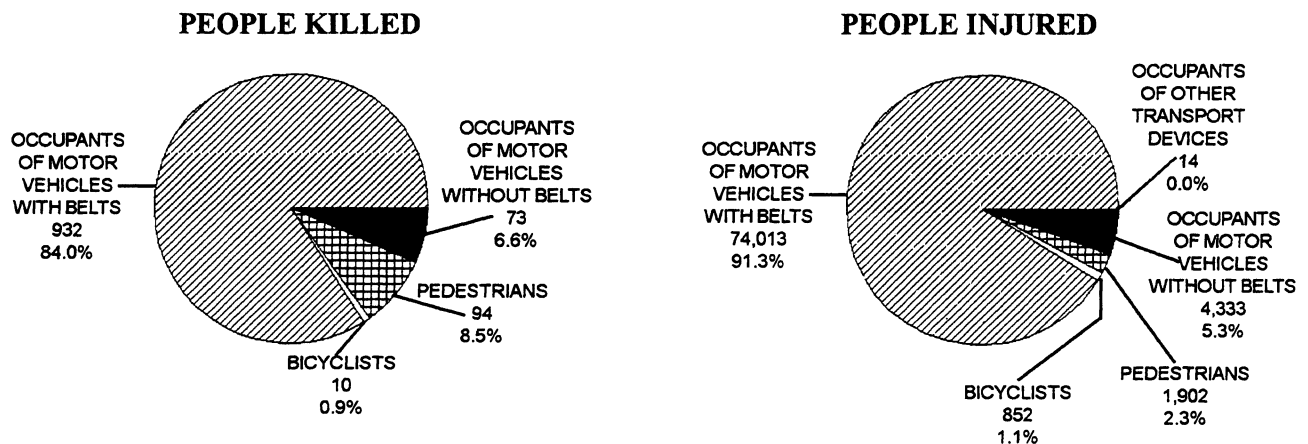
# Occupant Protection



## OCCUPANT PROTECTION

It is well recognized that one of the best ways to protect oneself from death and injury when traveling in a motor vehicle is to wear seat belts and, for the very young person, it is to place them in a child safety seat. For a number of years, motor vehicle manufacturers have been required to install seat belts in their vehicles. As a result, the majority of motor vehicles on Missouri roadways have these types of safety devices installed. When analyzing traffic crashes resulting in deaths and injuries, the vast majority of the vehicles had seat belts available for use. In 1995, there were 1,109 people killed in traffic crashes; 84.0% were occupants of vehicles which, in all probability, had a seat belt available for use. Of the 81,114 people injured, 91.3% were driving or riding in vehicles having seat belts.

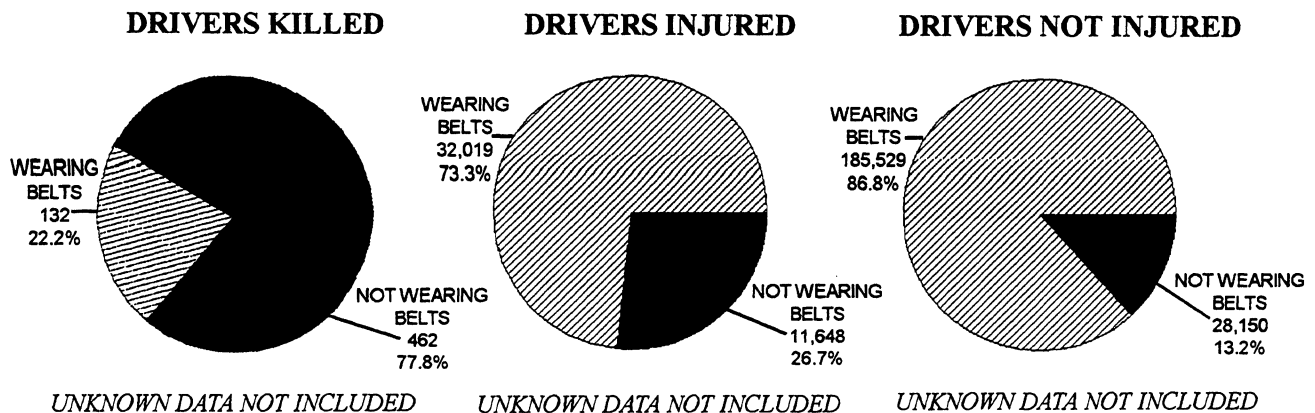
### 1995 MISSOURI TRAFFIC CRASHES



A substantial number of drivers killed were not wearing their seat belts (77.8%) compared to those who were and were not injured. Of those injured, 26.7% were not belted and of those not injured, only 13.2% were not wearing a seat belt.

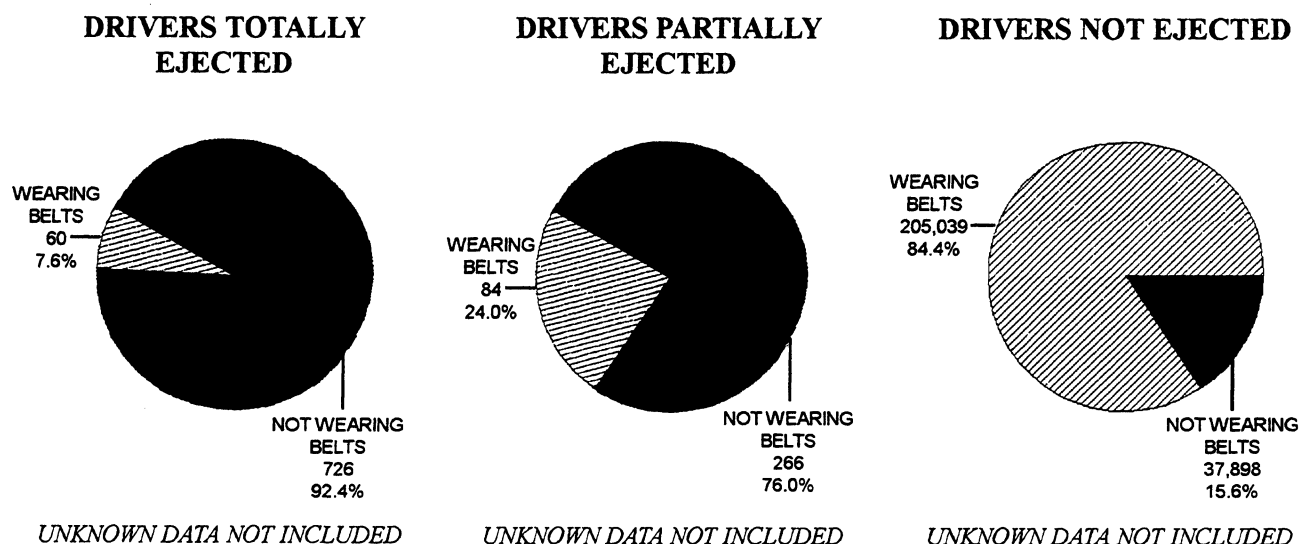
### 1995 MISSOURI TRAFFIC CRASHES

#### SEAT BELT USAGE



The possibility of death and injury dramatically increases when a person is ejected from the vehicle at the time of the crash. One of the benefits of being belted is that it increases the probability of the person staying in the vehicle and being protected by the passenger compartment. Of those drivers *totally ejected*, **92.5% were not wearing seat belts** (of those partially ejected, 76.0% were not belted).

### 1995 MISSOURI TRAFFIC CRASHES SEAT BELT USAGE

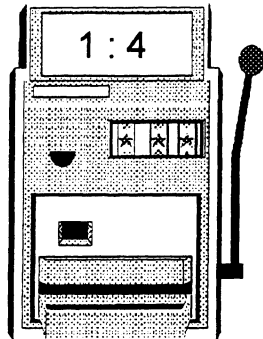


Seat belt usage dramatically reduces a person's chance of being killed and injured in a traffic crash. Of the drivers involved in crashes, 1 in 4 were injured if they were not wearing their seat belt, but that chance decreased to 1 in 7 when wearing a seat belt. When examining driver deaths, the differences are much more dramatic. Drivers had 1 chance in 87 of being killed if not wearing a seat belt, but in those cases where the driver wore a seat belt, their chance of being killed **decreased to 1 in 1,649**.

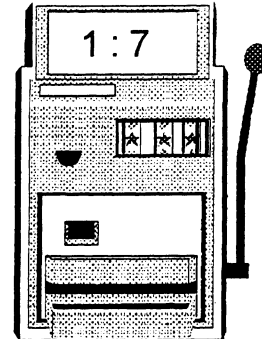
## 1995 MISSOURI TRAFFIC CRASHES

### CHANCE OF DRIVER BEING INJURED

NOT WEARING SEAT BELTS

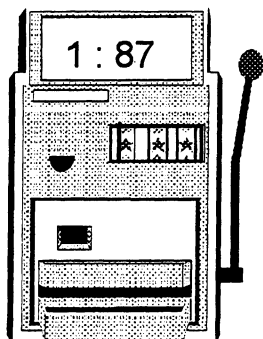


WEARING SEAT BELTS

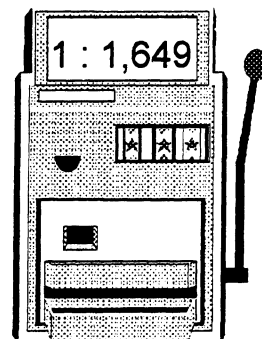


### CHANCE OF DRIVER BEING KILLED

NOT WEARING SEAT BELTS



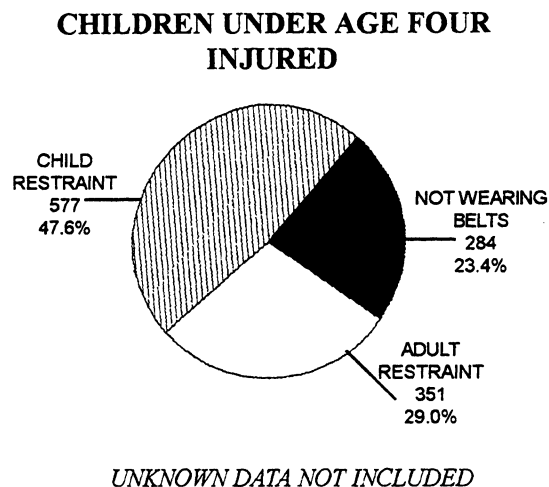
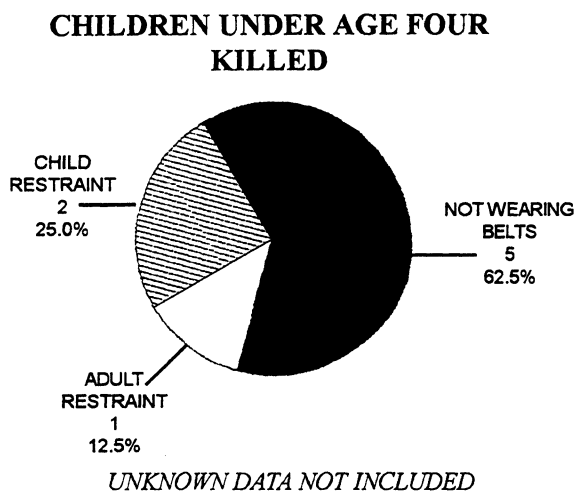
WEARING SEAT BELTS



From a public safety policy perspective, Missouri must continue to promote the use of seat belts by motor vehicle occupants. In addition, special attention must be paid to increasing the use of child safety seats when transporting young children. In 1995, a total of 9 children under the age of 4 were killed in a motor vehicle. In known cases, **62.5%** of those *were not using any type of restraint device*. In one instance, an adult restraint device was used which probably had little or no safety effect. There were 1,296 children under 4 who were injured; in known cases, 23.4% were not using any type of restraint device and 29.0% were in an adult seat belt.



## 1995 MISSOURI TRAFFIC CRASHES OCCUPANT RESTRAINT USAGE



Missouri has had safety belt surveys performed by the State Highway Patrol (predominantly on Interstates and major highways) and also by local law enforcement agencies (predominantly within city limits and often in the more rural, smaller communities). Surveys performed by the Patrol have indicated an average usage rate of 68% while surveys from the local communities have shown an average usage rate of 52%. Surveys by Missouri's SAFE KIDS Coalitions have indicated that misuse of child safety seats remains a large problem—a staggering 80% of the seats were noted as being improperly used/installed. Unfortunately, Missouri has not had a good mechanism in place to survey proper usage of child safety seats statewide.

### ***Benchmarks***

1. Increase statewide usage of safety belts to 70%
2. Increase proper use of child safety seats to 80%
3. Establish quarterly statewide surveys of child safety seat usage rates

### ***Performance Measures***

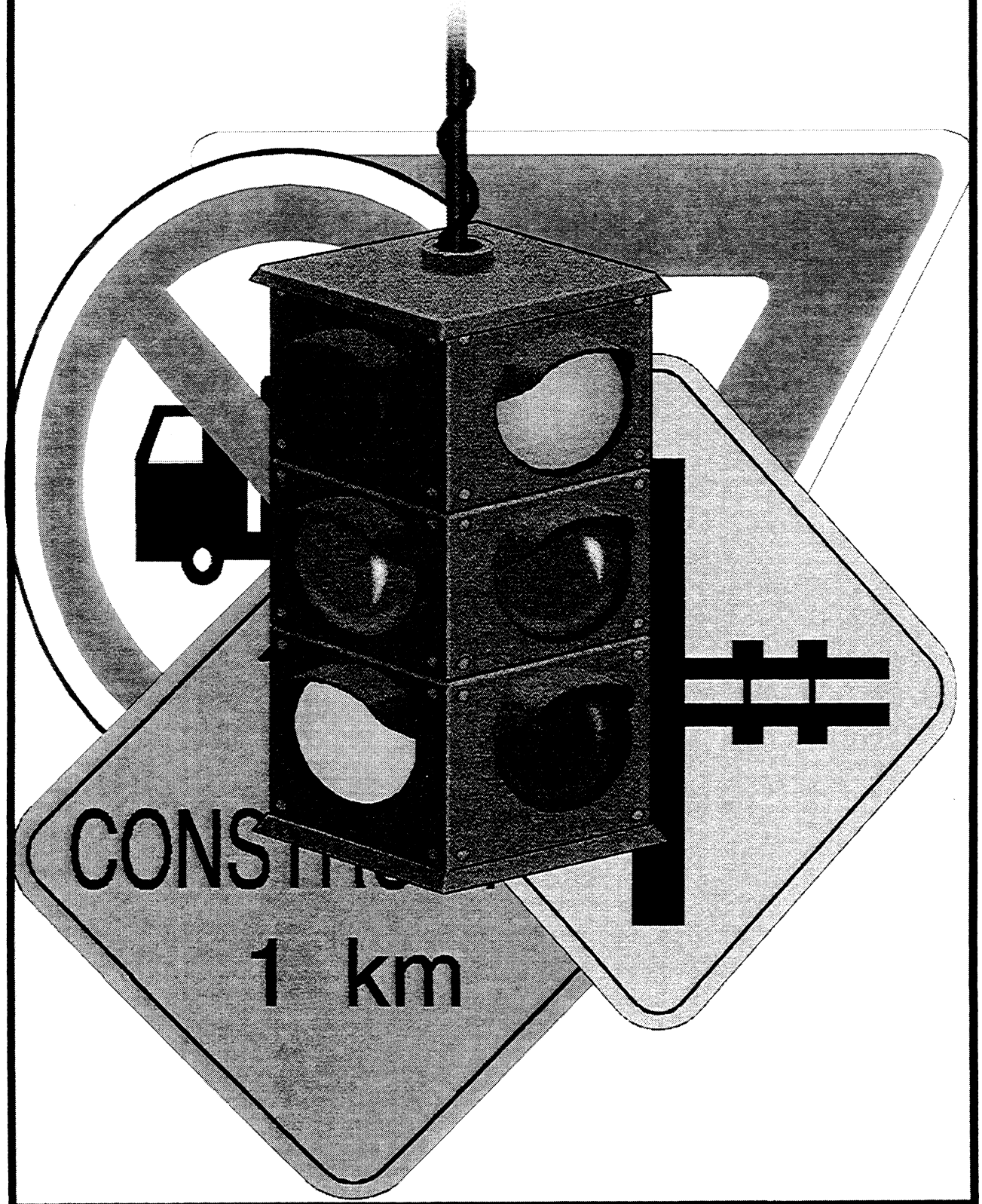
Ongoing analysis of the traffic crash data in Missouri will serve as the means to measure progress toward the Benchmarks. Usage rates will be analyzed in those target areas where safety belt projects have been established.

Properly administered and consistent occupant restraint usage surveys will be conducted throughout the state by the Highway Patrol and local law enforcement agencies. Usage rates will be monitored to analyze the effectiveness of our enforcement and educational campaigns.

### ***Strategies***

- Develop educational and enforcement campaign for law enforcement
- Develop traffic safety school curriculum with components on seat belt usage
- Provide safety belt checkpoint packets to local safety advocates (at Regional Traffic Safety Workshops)
- Provide overtime funding to law enforcement agencies to conduct safety belt checkpoints
- Provide training and an approved child safety seat to economically-disadvantaged families in order to comply with Missouri's primary child restraint law
- Develop campaign to educate parents about the dangers of babies and airbags; partner with auto dealers, pediatricians and obstetricians, hospitals, and safety advocates
- Work closely with bill sponsors for passage of primary enforcement law (which would include required seat belt usage in pickup trucks)

# Engineering Services



## ENGINEERING SERVICES & DATA COLLECTION

Other areas which are vital to an effective and efficient traffic safety program are data collection and engineering services.

### *STARS Maintenance & Traffic Safety Compendium*

The traffic safety program supports maintenance of the Statewide Traffic Accident Reporting System (STARS) which is the repository for all crash statistics. The Traffic Safety Compendium, the document which supports this data-driven program, is compiled utilizing the statistics which are collected in STARS. Without this vital component, it would be difficult to develop a comprehensive plan based on consistently reported crash data.

### *Local Community Traffic Assistance*

Small local communities often lack the resources, personnel and fiscal, to support proper study in order to determine whether the community has proper traffic signing and control devices, whether improvements are warranted in order to reduce traffic crashes, and whether bridges are adequate and safe.

- *Traffic Signing Projects*

Since uniform and consistent traffic signing reduces traffic crashes, the Division participates in a cost-sharing program for materials required to bring local communities into compliance with the national Manual on Uniform Traffic Control Devices. This is accomplished through the implementation of a local Traffic Signing Plan.

- *Bridge and Traffic Engineering Assistance Programs*

Technical expertise is also provided to cities and counties to conduct bridge and traffic engineering countermeasure analysis (including bridge inspections and traffic control device inventory). In order to provide assistance in these areas, the Division of Highway Safety allocates funding, through the Missouri Department of Transportation, for two consultants to perform this service for the local jurisdictions. These projects are identified as the Bridge Engineering Assistant Program (BEAP) and the Traffic Engineering Assistance Program (TEAP) respectively.

### *Training*

Support is also given to provide traffic engineering forums and technology transfer to enhance local capability for accident countermeasure developments. This is accomplished through training workshops and conferences.

### ***Benchmarks***

1. Production of the Traffic Safety Compendium in a timely fashion which can be easily put to use by state and local traffic safety advocates, law enforcement agencies, media, and the general public
2. Provide assistance to approximately 40 local communities for traffic and bridge engineering
3. Provide training for engineering professionals at workshops and the 47<sup>th</sup> Annual Traffic Conference (attendance will be determined by conference costs based on location and travel constraints)

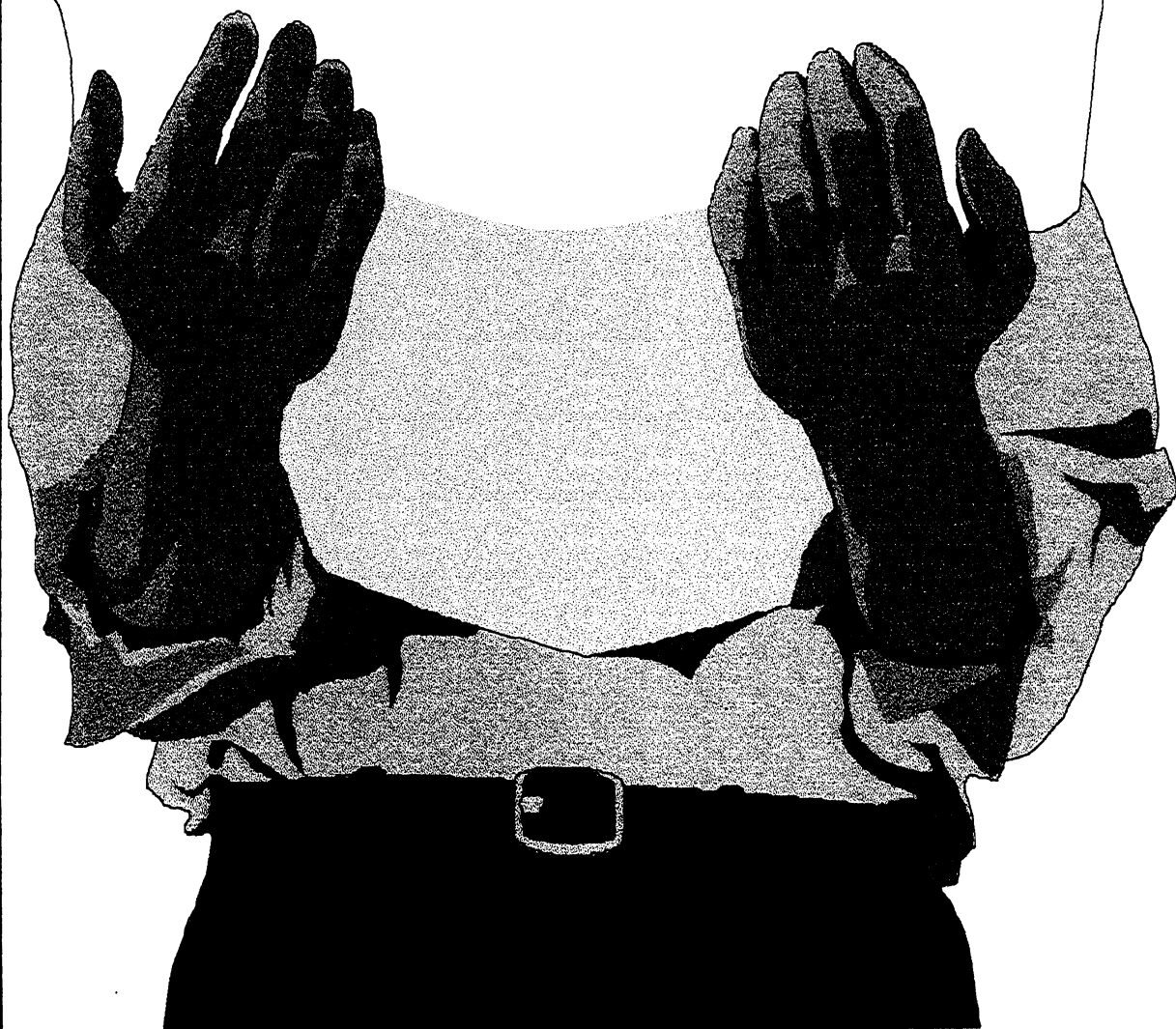
### ***Performance Measures***

Continue tracking and analyzing the statistics to determine which problem areas have demonstrated an increase or decrease in crash activity. Evaluate crash statistics by geographic location, driver subgroups, and causation factors to determine positive or negative trends.

### ***Strategies***

- Encode all accident reports into the STARS system, ensuring accuracy and efficiency.
- Utilize statistics to produce the annual Traffic Safety Compendium to assist the Division of Highway Safety and local communities in developing problem identification
- Provide expertise and funding to assure local communities are in compliance with uniform traffic codes and that the bridges within their jurisdictions are upgraded in terms of their safety
- Provide training to assure state and local engineers are kept abreast of current technology

FY '97  
Projects



## FY '97 PROJECTS

Task	Project #	Grantee	Problem Areas & Project Countermeasures	Total Allocation	Funding Source		
					402	402 YA	410
			<b><i>Planning &amp; Administration</i></b>	<b>\$140,000</b>			
1	97-PA-01	MDHS	Coordination (internal administration)	\$140,000	\$140,000		
			<b><i>Police Traffic Services</i></b>	<b>\$1,772,280</b>			
1	97-PT-02-1	MDHS	Coordination (program management)	\$98,000	\$98,000		
3	97-PT-02-2	MDHS	LETSAC Advisory Council Support	\$20,000	\$20,000		
4	97-PT-02-3	CMSU	Law Enforcement Traffic Training Program	\$47,375	\$47,375		
4	97-PT-02-4	UMC	Law Enforcement Traffic Training Program	\$5,000	\$5,000		
4	97-PT-02-5	MO Southern	Law Enforcement Traffic Training Program	\$17,920	\$17,920		
4	97-PT-02-6	MSHP	Law Enforcement Traffic Training Program	\$70,000	\$70,000		
5	97-PT-02-7	MSHP	CARE (Combined Accident Reduction Enforcement) Conference	\$20,000	\$20,000		
6	97-PT-02-8	MSHP	Aircraft Fuel for Speed Enforcement	\$40,000	\$40,000		
7	97-PT-02-9	MDHS	*Postage, Printing & Photography (internal)	\$120,000	\$120,000		
7	97-PT-02-10	MDHS	*Public Information & Education (internal)	\$50,000	\$50,000		
7	97-PT-02-11	MDHS	*Newsletter	\$15,000	\$15,000		
7	97-PT-02-12	University of MO-Columbia	*Survey (Zero Tolerance & Speed); Marketing; Interactive traffic safety CD rom for youthful drivers	\$100,000	\$100,000		
7	97-PT-02-13	MDHS	*Equipment Upgrade (internal)	\$20,000	\$20,000		
7	97-PT-02-14	MDHS	*National/Regional Highway Safety Workshops (internal)	\$40,000	\$40,000		
7	97-PT-02-15	MDHS	*Missouri Regional Traffic Safety Workshops (internal)	\$22,000	\$22,000		
7	97-PT-02-16	Economic Development	*Operation Lifesaver Educational Materials	\$5,000	\$5,000		
7	97-PT-02-17	CMSU	*Motorcycle	\$66,000	\$66,000		
8	97-PT-02-18	CMSU	*Parent's Survival Guide for Young Drivers	\$12,960		\$12,960	
8	97-YA-02-19	University of MO-Columbia	*Heads Up (traffic safety prevention education program)	\$77,516		\$77,516	
8	97-YA-02-20	Research Medical Center KC	*Heads Up (traffic safety prevention education program)	\$20,000		\$20,000	
8	97-YA-02-21	Research Medical Center KC	*Traffic Offenders (young drivers recidivism reduction program)	\$38,750		\$38,750	
8	97-YA-02-22	MDHS	*National Student Safety Program (NSSP) Conference	\$25,000		\$25,000	
8	97-YA-02-23	MDHS	*Youth PI&E (including Traffic Safety Curriculum; Employee Awareness Program; Idea Packet for Schools/Communities)	\$50,000		\$50,000	

Task	Project #	Grantee	Problem Areas & Project Countermeasures	Total Allocation	Funding Source		
					402	402 YA	410
35		<b><u>Region 1</u></b>	<b><u>Enforcement—New Projects</u></b>				
	9 97-PT-02-24	Grandview PD	HMV O.T. Enforcement; Alcohol Wolfpack O.T.	\$7,000	\$7,000		
	9 97-PT-02-25	Clay County SD	HMV O.T. Enforcement; Alcohol Wolfpack O.T.; Sobriety Checkpoints; Safety Belt Checkpoints; 1 Full-time Traffic Officer	\$43,000	\$43,000		
	9 97-PT-02-26	Platte County SD	HMV O.T. Enforcement; Alcohol Wolfpack O.T.; Safety Education	\$16,700	\$16,700		
	9 97-PT-02-27	Independence PD	HMV O.T. Enforcement; Alcohol Wolfpack O.T.; Sobriety Checkpoints; Bicycle Safety Education; Youth Alcohol Wolfpack	\$32,150	\$22,150	\$10,000	
	9 97-YA-02-28						
	9 97-PT-02-29	Gladstone DPS	Sobriety Checkpoints	\$2,250	\$2,250		
	9 97-PT-02-30	Cass County SD	Sobriety Checkpoints; 1 Full-time Traffic Officer; Vehicle Allowance	\$40,250	\$40,250		
	9 97-PT-02-31	Kansas City PD	HMV O.T. Enforcement; Sobriety Checkpoints; Multi-Offender	\$89,000	\$89,000		
			<b><i>(Subtotal Region 1 \$230,350)</i></b>				
		<b><u>Region 2</u></b>					
	9 97-PT-02-32	St. Louis County PD	Sobriety Checkpoints; SMART Trailer; Arrive Alive Youth Alcohol Program	\$47,000	27,000	\$20,000	
	9 97-YA-02-33		Breath Alcohol Testing (BAT) Van—see Alcohol section				
	9 97-PT-02-34	St. Louis City PD	HMV O.T. Enforcement; Alcohol Wolfpack O.T., Sobriety Checkpoints; 40 Preliminary Breath Test (PBT) Units	\$167,500	\$167,500		
	9 97-PT-02-35	Jefferson County SD	Alcohol Wolfpack O.T.; Sobriety Checkpoints	\$27,250	\$27,250		
			Video camera—see Alcohol section				
	9 97-PT-02-36	St. Charles County SD	Alcohol Wolfpack O.T.; Sobriety Checkpoints	\$6,250	\$6,250		
	9 97-PT-02-37	St. Charles City PD	HMV O.T. Enforcement; Sobriety Checkpoints; Laser Radar	\$15,250	\$15,250		
	9 97-PT-02-38	Florissant PD	HMV O.T. Enforcement (I-270); Sobriety Checkpoints	\$7,250	\$7,250		
	9 97-PT-02-39	Ferguson PD	HMV O.T. Enforcement (I-270)	\$5,000	\$5,000		
	9 97-PT-02-40	Bellefontaine Neighbors PD	HMV O.T. Enforcement (I-270); Sobriety Checkpoints	\$7,250	\$7,250		
	9 97-PT-02-41	Hazelwood PD	HMV O.T. Enforcement (I-270)	\$5,000	\$5,000		
	9 97-PT-02-42	St. Ann PD	Sobriety Checkpoints	\$2,250	\$2,250		
	9 97-PT-02-43	St. John PD	Sobriety Checkpoints	\$2,250	\$2,250		
	9 97-PT-02-44	Creve Coeur PD	Sobriety Checkpoints	\$2,250	\$2,250		
	9 97-PT-02-45	Maryland Heights PD	Solar Portable Changeable Message Sign with Visual Display Radar	\$29,000	\$29,000		
			<b><i>(Subtotal Region 2 \$323,500)</i></b>				



Task	Project #	Grantee	Problem Areas & Project Countermeasures	Total Allocation	Funding Source		
					402	402 YA	410
9	97-PT-02-46	<b><u>Region 3</u></b> Neosho PD	Sobriety Checkpoints	\$2,250	\$2,250		
	97-PT-02-47	Columbia PD	Alcohol Wolfpack O.T.	\$29,000	\$29,000		
	97-PT-02-48 97-YA-02-49	Sedalia PD	Alcohol Wolfpack O.T.; Sobriety Checkpoint; Occupant Restraint Project; Youth Alcohol Enforcement (Arrive Alive)	\$20,058	\$15,738	\$4,320	
	97-PT-02-50	Jefferson City PD	Motorcycle Enforcement; Sobriety Checkpoints Breath Alcohol Testing (BAT) Van—see Alcohol section	\$11,250	\$11,250		
	97-PT-02-51	Boone County SD	Sobriety Checkpoints	\$2,250	\$2,250		
	97-PT-02-52	Jasper County SD	HMV O.T. Enforcement; Alcohol Wolfpack O.T. Enforcement	\$10,000	\$10,000		
	97-PT-02-53	Taney County SD	Sobriety Checkpoints	\$2,250	\$2,250		
	97-PT-02-54	Cassville PD	Sobriety Checkpoints	\$2,250	\$2,250		
	97-PT-02-76	Joplin PD	Sobriety Checkpoints	\$2,250	\$2,250		
			<b>(Subtotal Region 3 \$81,558)</b>				
9	97-PT-02-55	<b><u>Region 4</u></b> Bonne Terre PD	Sobriety Checkpoints	\$2,250	\$2,250		
			<b>(Subtotal Region 4 \$2,250)</b>				
10	97-PT-02-56	<b><u>Region 1</u></b> Clay County SD	<b><u>Enforcement—Carryover Projects</u></b> 1 Full-time Traffic Officer (final portion of 3-year project)	\$7,002	\$7,002		
	97-PT-02-57	Grundy County SD	1 Full-time Traffic Officer (final portion of 3-year project)	\$4,368	\$4,368		
			<b>(Subtotal Region 1 \$11,368)</b>				
10	97-PT-02-58	<b><u>Region 2</u></b> Breckenridge Hills PD	1 Full-time Traffic Officer (final portion of 3-year project)	\$5,700	\$5,700		
	97-PT-02-59	Festus PD	1 Full-time Traffic Officer (final portion of 3-year project)	\$15,700	\$15,700		
	97-PT-02-60	Hannibal PD	1 Full-time Traffic Officer (final portion of 3-year project)	\$5,875	\$5,875		
	97-PT-02-61	Lincoln County SD	1 Full-time Traffic Officer (final portion of 3-year project)	\$5,047	\$5,047		
	97-PT-02-62	Shrewsbury PD	1 Full-time Traffic Officer (final portion of 3-year project)	\$6,313	\$6,313		
	97-PT-02-63	St. Clair PD	1 Full-time Traffic Officer (final portion of 3-year project)	\$4,648	\$4,648		
			<b>(Subtotal Region 2 \$43,283)</b>				

Task	Project #	Grantee	Problem Areas & Project Countermeasures	Total Allocation	Funding Source		
					402	402 YA	410
		<b><u>Region 3</u></b>					
10	97-PT-02-64	Boone County SD	1 Full-time Traffic Officer (portion of 3-year project)	\$24,287	\$24,287		
10	97-PT-02-65	Boone County SD	1 Full-time Traffic Officer (final portion of 3-year project)	\$1,858	\$1,858		
10	97-PT-02-66	Callaway County SD	1 Full-time Traffic Officer (final portion of 3-year project)	\$4,505	\$4,505		
10	97-PT-02-67	Cole County SD	1 Full-time Traffic Officer (final portion of 3-year project)	\$5,906	\$5,906		
10	97-PT-02-68	Jasper County SD	1 Full-time Traffic Officer (final portion of 3-year project)	\$3,750	\$3,750		
10	97-PT-02-69	Osage Beach PD	1 Full-time Traffic Officer (final portion of 3-year project)	\$8,951	\$8,951		
10	97-PT-02-70	St. Clair County SD	1 Full-time Traffic Officer (final portion of 3-year project)	\$3,750	\$3,750		
10	97-PT-02-71	Taney County SD	1 Full-time Traffic Officer (final portion of 3-year project)	\$9,332	\$9,332		
10	97-PT-02-72	Forsyth PD	1 Full-time Traffic Officer (final portion of 3-year project)	\$7,079	\$7,079		
10	97-PT-02-73	Nixa PD	1 Full-time Traffic Officer	\$14,000	\$14,000		
10	97-PT-02-75	Hollister PD	1 Full-time Traffic Officer	\$9,520	\$9,520		
			<b>(Subtotal Region 3 \$92,938)</b>				
		<b><u>Region 4</u></b>					
10	97-PT-02-74	Poplar Bluff PD	1 Full-time Traffic Officer (final portion of 3-year project)	\$6,510	\$6,510		
			<b>(Subtotal Region 4 \$6,510)</b>				
			<b><u>Alcohol</u></b>	<b>\$1,013,372</b>			
1	97-AL-03-1	MDHS	Coordination (program management)	\$90,000	\$90,000		
2	97-AL-03-2	MDHS	Governor's Commission on DWI & Impaired Driving	\$5,000	\$5,000		
3	97-AL-03-3	CMSU	Breath Alcohol Instrument Training Laboratory	\$75,924	\$75,924		
3	97-AL-03-3	CMSU	Breath Instrument Placement Program	\$73,793	\$73,793		
4	97-AL-03-4	MSHP	Alcohol Wolfpack O.T.	\$90,000	\$90,000		
5	97-AL-03-5	UMC	CHEERS Designated Driver Program	\$80,000	\$80,000		
6	97-YA-03-6	MDHS	Drunk Driving Simulator (local match program)	\$10,000		\$10,000	
		Sedalia PD	Youth Alcohol Saturation Enforcement (Arrive Alive)- see PTS section				
		Independence PD	Youth Alcohol Saturation Enforcement (Arrive Alive)- see PTS section				
		St. Louis County PD	Youth Alcohol Education Program- see PTS section				
		Cape Girardeau	Team Spirit Conference- see Safe Communities section				
		Springfield	Team Spirit Conference- see Safe Communities section				

Task	Project #	Grantee	Problem Areas & Project Countermeasures	Total Allocation	Funding Source		
					402	402 YA	410
		N. Cent. MO Safety Council	Spirit Conference- see Safe Communities section				
		CMSU	Parent's Survival Guide for Young Drivers—see PTS section				
		University of MO-Columbia	Heads Up (traffic safety prevention education prog.)- see PTS section				
		Research Med. Center K.C.	Heads Up (traffic safety prevention education prog.)- see PTS section				
		Research Med. Center K.C.	Traffic Offenders (young drivers recidivism reduction prog.)- see PTS				
		MDHS	National Student Safety Program (NSSP) Conf.- see PTS section				
		MDHS	Youth PI&E (including: traffic safety curriculum, employee awareness program; idea packet for schools/communities)- see PTS section				
5	97-J7-03-13	MSHP	Sobriety Checkpoints	\$80,000			\$80,000
1	97-J7-03-1	MDHS	Breath Alcohol Testing (BAT) Vans-St. Louis County & Jefferson City	\$80,000			\$80,000
4	97-J7-03-4 thru 12	Local Law Enforcement	Overtime Enforcement for BAT Vans (8 @ \$2,000)	\$16,000			\$16,000
2	97-J7-03-2	MDHS	Video Cameras for BAT Vans (7 cameras)	\$35,000			\$35,000
3	97-J7-06-3	MDHS	Designated Driver Program	\$50,000			\$50,000
2	97-J7-06-2	Liquor Control	Server Training	\$40,000			\$40,000
3	97-J7-03-3	Liquor Control	Badges in Businesses	\$50,000			\$50,000
3	97-J7-04-3	CMSU	Police Video In-Car/BAT Van Operations	\$12,960			\$12,960
1	97-J7-04-1	CMSU	SFST Instructor Certification/Recertification Program	\$14,092			\$14,092
2	97-J7-04-2	CMSU	Sobriety Checkpoint Supervisor Course	\$10,000			\$10,000
4	97-J7-04-4	MO Southern	SFST & DWI Crash Investigation Courses	\$3,600			\$3,600
4	97-J7-04-5	St. Louis County Academy	SFST & DWI Crash Investigation Courses	\$3,600			\$3,600
4	97-J7-04-6	Law Enf. Academy UMC	SFST Course	\$3,920			\$3,920
4	97-J7-04-7	Mineral Area College	SFST & DWI Crash Investigation Courses	\$2,028			\$2,028
1	97-J7-06-1	MDHS	Public Information and Education	\$30,365			\$30,365
1	97-J7-05-1	State Courts Administrator	DWI Training Seminars	\$20,000			\$20,000
2	97-J7-05-2	Attorney General	DWI Prosecution	\$14,000			\$14,000
3	97-J7-05-3	MDHS	Annual Courts Conference	\$10,000			\$10,000
1	97-J7-02-1	Department of Revenue	General Registration System Rewrite	\$61,590			\$61,590
2	97-J7-02-2	Department of Revenue	General Counsel Training	\$11,000			\$11,000
	97-J7-02-3	Department of Revenue	Failure to Appear in Court	\$2,000			\$2,000

Task	Project #	Grantee	Problem Areas & Project Countermeasurers	Total Allocation	Funding Source		
					402	402 YA	410
3	97-J7-02-5	Department of Revenue	Administrative Alcohol Subsystem Printer	\$3,500			\$3,500
4	97-J7-02-4	Department of Revenue	Upgrade Network	\$25,000			\$25,000
6	97-J7-03-14	MDHS	Coordination (Program Management)	\$10,000			\$10,000
			<b>Occupant Protection</b>	<b>\$20,000</b>			
1	97-OP-05-1	MDHS	Coordination (program management)	\$5,000	\$5,000		
			Activities are implemented within the Police Traffic Services and Safe Communities sections				
2	97-OP-05-2	MDHS	Educational Materials	\$15,000	\$15,000		
			<b>Traffic Records</b>	<b>\$113,685</b>			
1	97-TR-06-1	MDHS	Coordination (program management)	\$35,000	\$35,000		
2	97-TR-06-2	CMSU	MOTIS--Missouri Traffic Information System (computer program)	\$78,685	\$78,685		
			<b>Safe Communities</b>	<b>\$377,795</b>			
1	97-SA-09-1	MDHS	Coordination (program management)	\$20,000	\$20,000		
2	97-SA-09-2	Cape Girardeau	Safe Community (includes Team Spirit Youth Conference)	\$160,000	\$160,000		
3	97-SA-09-3	Springfield	Safe Community (includes: Team Spirit Youth Conference; Springfield PD MHV O.T. Enforcement \$24,400; Sobriety Checkpoints \$2,250; BAT Van O.T. \$12,000; DWI Officer \$20,909)	\$142,195	\$142,195		
4	97-SA-09-4	Moberly	Safe Community (includes Youth Spirit Day)	\$55,600	\$55,600		
			<b>Engineering Services &amp; Data Collection</b>	<b>\$225,694</b>			
1	97-FTE-11-1	MDHS	Coordination (program management)	\$14,000	\$14,000		
2	97-FTE-11-2	MSHP	STARS Maintenance	\$30,000	\$30,000		
3	97-FTE-11-3	MSHP	Traffic Safety Compendium (Statistical Analysis)	\$18,000	\$18,000		
4	97-FTE-11-4	Local Communities	Traffic Signing Projects	\$15,694	\$15,694		
5&6	97-FTE-11-5	MODOT	Bridge & Traffic Engineering Assistant Programs (BEAP & TEAP)	\$128,000	\$128,000		
7	97-FTE-11-6	MODOT	Training & Conferences	\$20,000	\$20,000		

**TOTAL 402 PLANNED ACTIVITIES FY '97    \$3,074,171**

**\$2,579,931                      402 Regular**

**\$ 268,546                      402 YA**

**\$ 225,694                      3+**

**TOTAL 410 PLANNED ACTIVITIES FY '97    \$588,655**

40

\* -- Public Information and Education and Vehicular, Driver and Pedestrian Safety are included in the Police Traffic Services section.

# HIGHWAY SAFETY PROGRAM COST SUMMARY

O.M.B.No.2127-0003

## SEC 402 FUNDS

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
Federal Highway Administration

State MISSOURI Number: FY 97 HSP 01 Date 9/96

Program Area	Cost	Basis For % Change	State / Local Funds	Federally Funded Programs				Federal Share To Local
				Previous Balance	Increase/Decrease	% Change	Current Balance	
PA-97-01	\$140,000.00	\$140,000.00			\$140,000.00	1	\$140,000.00	
PT-97-02	1,513,734.00	1,513,734.00	603,338.00		1,513,734.00	1	1,513,734.00	603,338.00
YA-97-02	258,546.00	258,546.00	154,101.00		258,546.00	1	258,546.00	154,101.00
<b>SUBTOTAL PT/YA-97</b>	<b>1,772,280.00</b>	<b>1,772,280.00</b>	<b>757,439.00</b>		<b>1,772,280.00</b>		<b>1,772,280.00</b>	<b>757,439.00</b>
AL-97-03	414,717.00	414,717.00			414,717.00	1	414,717.00	
YA-97-03	10,000.00	10,000.00			10,000.00	1	10,000.00	
OP-97-05	20,000.00	20,000.00			20,000.00	1	20,000.00	
TR-97-06	113,685.00	113,685.00			113,685.00	1	113,685.00	
SA-97-09	377,795.00	377,795.00	213,795.00		377,795.00	1	377,795.00	213,795.00
<b>TOTAL NHTSA</b>	<b>\$2,848,477.00</b>	<b>\$2,848,477.00</b>	<b>\$971,234.00</b>		<b>\$2,848,477.00</b>	<b>1</b>	<b>\$2,848,477.00</b>	<b>\$971,234.00</b>
FTE-97-11	225,694.00	225,694.00			225,694.00	1	225,694.00	
<b>TOTAL FHWA</b>	<b>\$225,694.00</b>	<b>\$225,694.00</b>			<b>225,694.00</b>	<b>1</b>	<b>\$225,694.00</b>	
<b>TOTAL NHTSA &amp; FHWA</b>	<b>\$3,074,171.00</b>	<b>\$3,074,171.00</b>	<b>\$971,234.00</b>		<b>\$3,074,171.00</b>	<b>1</b>	<b>\$3,074,171.00</b>	<b>\$971,234.00</b>

State Official Authorized Signature:

Federal Official(s) Authorizing Signature

NAME: [Signature]

NHTSA-NAME: \_\_\_\_\_

FHWA - NAME: \_\_\_\_\_

TITLE: Dir. (G.R.)

TITLE: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: 9/10/96

EFFECTIVE DATE: \_\_\_\_\_

EFFECTIVE DATE: \_\_\_\_\_



# Missouri Division of Highway Safety

Department of Public Safety

P.O. Box 104808, Jefferson City, MO 65110-4808

(573) 751-4161 or 1-800-800-BELT FAX (573) 634-5977

Mel Carnahan  
Governor

Gary B. Kempker  
Department Director

Dan A. Needham, Div. Director  
Gov. Hwy. Safety Rep.

## MEMORANDUM

**TO:** Recipients of Missouri's 1997 Highway Safety Plan

**FROM:** Dan A. Needham *Dan*

**RE:** Revisions

**DATE:** September 17, 1996

On September 10, 1996, we mailed you a copy of the 1997 Highway Safety Plan for the State of Missouri. Corrections have been made to pages 17, 20, 27 and 29. Enclosed you will find the revised pages.

Sorry for any inconvenience this may have caused.

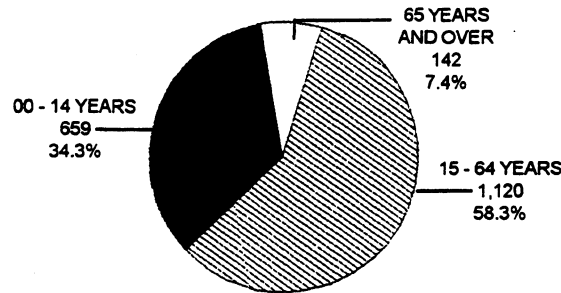
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Enclosures

A proportionately large number of these pedestrians are young people and, as a result, reducing these types of crashes takes on additional importance. Of the 1,996 pedestrians killed and injured, 34.3% were under the age of 15. Of all people killed and injured, 10.2% were under the age of 15. In addition, a greater proportion of older pedestrians are being killed on Missouri's roadways. Of the 94 pedestrians killed, 25.5% were 65 years or older compared 15.7% of all persons killed in that age group.

## 1995 MISSOURI TRAFFIC CRASHES INVOLVING PEDESTRIANS

### AGE OF PEDESTRIANS KILLED AND INJURED



UNKNOWN DATA NOT INCLUDED

### *Problem Areas – Enforcement Issues*

Police Traffic Services will address numerous problem areas in traffic safety with an emphasis on enforcement issues. Through data analysis, we discovered answers to the following questions:

*What are Missouri's most serious areas of traffic safety concern?*

- Speeding
- Alcohol Impairment
- Poor Occupant Restraint Use

*Which target groups of drivers are causing the most traffic crashes?*

- Speeding drivers
- Drinking drivers
- Young Drivers (under the age of 21)
- Mature Drivers (over the age of 55)

*Which geographic locations should be targeted?*

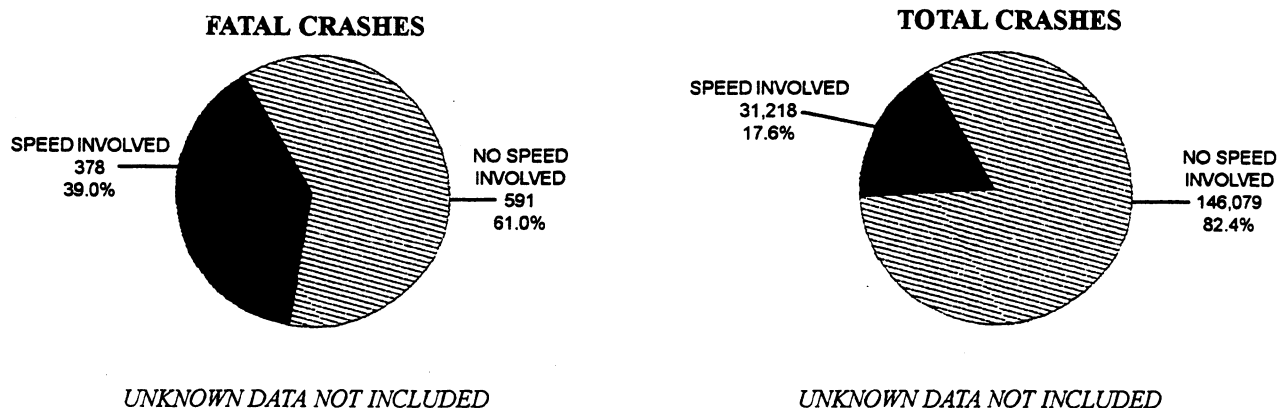
- Statewide -- While more crashes occur in the densely populated urban areas, three-fourths of the fatal crashes occur in rural areas



## SPEED INVOLVEMENT

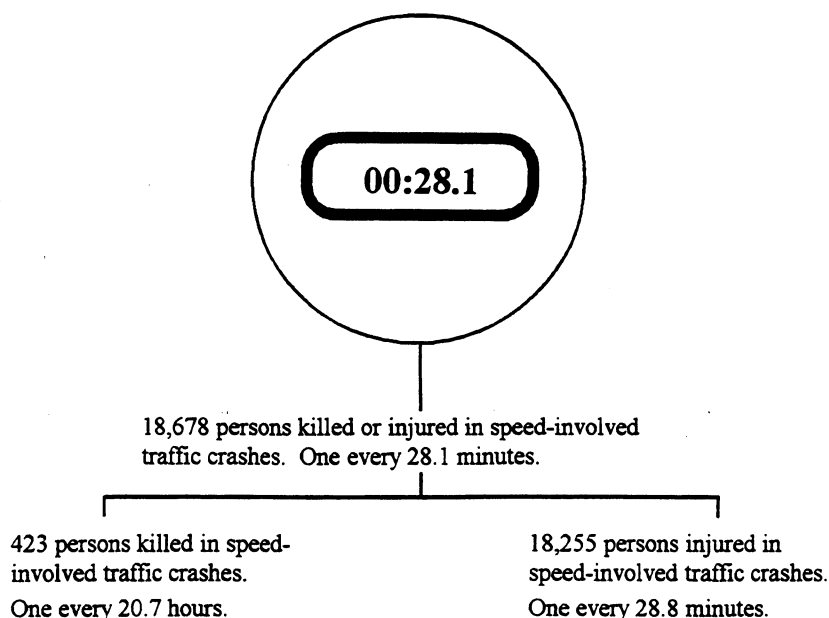
Speed is a substantial contributing factor in traffic crashes on Missouri's roadways, especially those resulting in death. Of the 185,915 traffic crashes which occurred in 1995, a total of 17.6% involved one or more drivers who were driving too fast for conditions or exceeding the speed limit. Missouri had 985 crashes where 1,109 people were killed—39.0% of them involved drivers who were speeding.

### 1995 MISSOURI SPEED-INVOLVED TRAFFIC CRASHES



In the speed-involved crashes, 423 people died and 18,255 were injured—in other words, one death every 20.7 hours and one injury every 28.8 minutes.

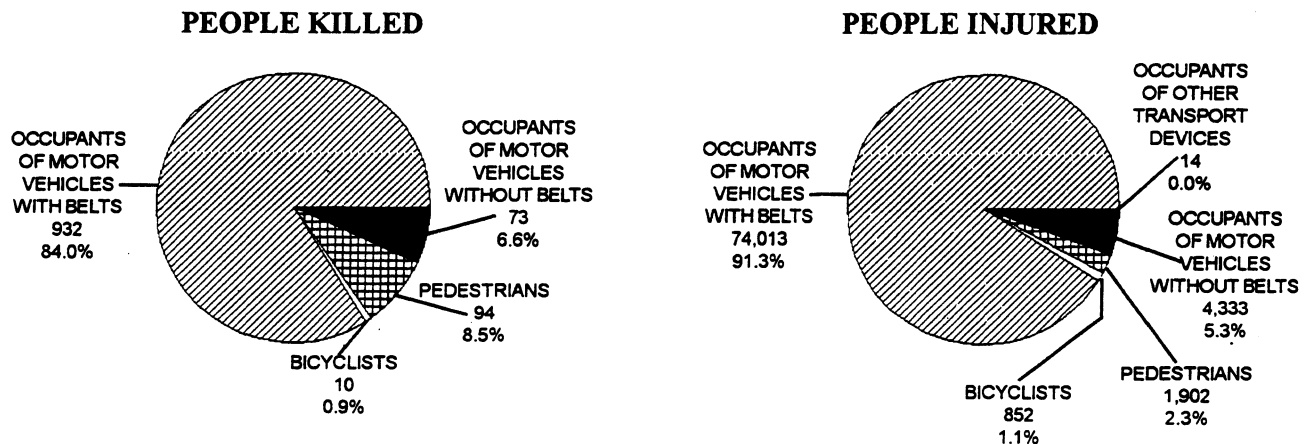
### MISSOURI SPEED-INVOLVED PERSONAL INJURY PROBLEM ANALYSIS CLOCK 1995



## OCCUPANT PROTECTION

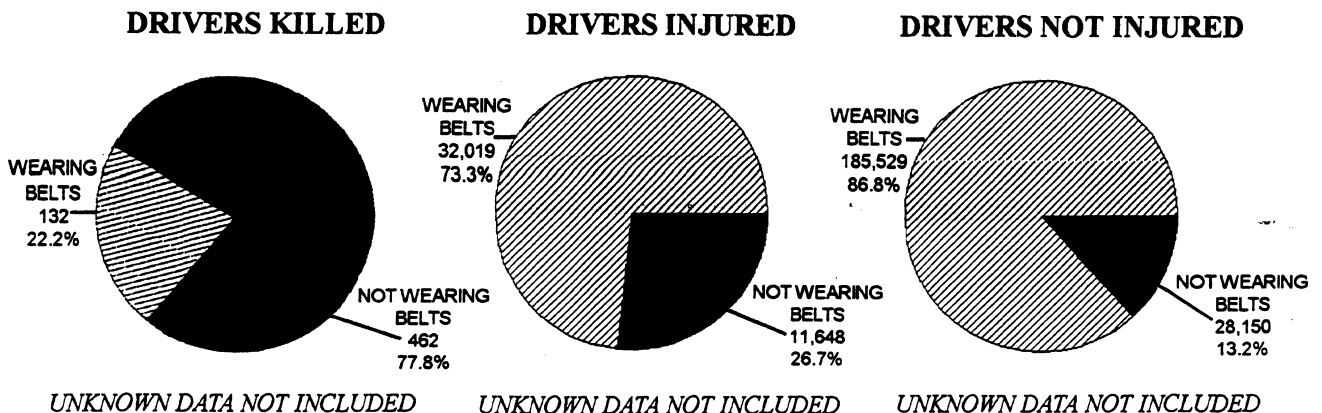
It is well recognized that one of the best ways to protect oneself from death and injury when traveling in a motor vehicle is to wear seat belts and, for the very young person, it is to place them in a child safety seat. For a number of years, motor vehicle manufacturers have been required to install seat belts in their vehicles. As a result, the majority of motor vehicles on Missouri roadways have these types of safety devices installed. When analyzing traffic crashes resulting in deaths and injuries, the vast majority of the vehicles had seat belts available for use. In 1995, there were 1,109 people killed in traffic crashes; 84.0% were occupants of vehicles which, in all probability, had a seat belt available for use. Of the 81,114 people injured, 91.3% were driving or riding in vehicles having seat belts.

### 1995 MISSOURI TRAFFIC CRASHES



A substantial number of drivers killed were not wearing their seat belts (77.8%) compared to those who were and were not injured. Of those injured, 26.7% were not belted and of those not injured, only 13.2% were not wearing a seat belt.

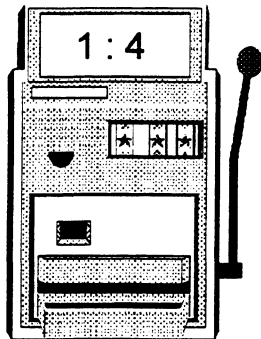
### 1995 MISSOURI TRAFFIC CRASHES SEAT BELT USAGE



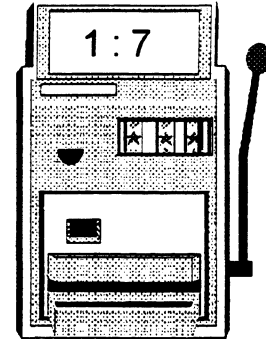
## 1995 MISSOURI TRAFFIC CRASHES

### CHANCE OF DRIVER BEING INJURED

NOT WEARING SEAT BELTS

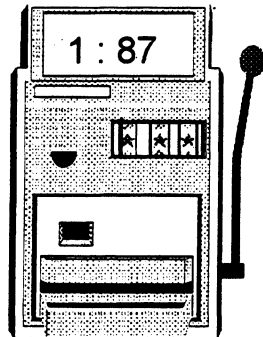


WEARING SEAT BELTS

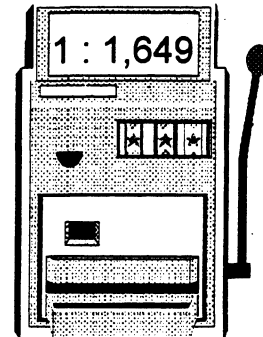


### CHANCE OF DRIVER BEING KILLED

NOT WEARING SEAT BELTS



WEARING SEAT BELTS



From a public safety policy perspective, Missouri must continue to promote the use of seat belts by motor vehicle occupants. In addition, special attention must be paid to increasing the use of child safety seats when transporting young children. In 1995, a total of 9 children under the age of 4 were killed in a motor vehicle. In known cases, **62.5% of those *were not using any type of restraint device***. In one instance, an adult restraint device was used which probably had little or no safety effect. There were 1,296 children under 4 who were injured; in known cases, 23.4% were not using any type of restraint device and 29.0% were in an adult seat belt.